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LONG'S

GARDEN BOOK

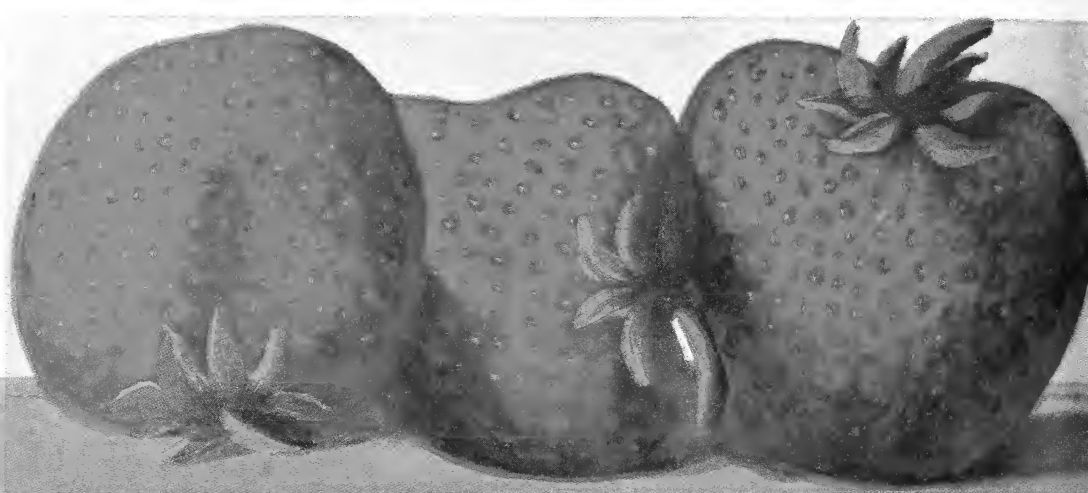
Spring, 1930



Long's Super-Giant Pansies (See Page 1)

THE J. D. LONG SEED COMPANY
BOULDER, COLORADO

Vegetable Seed Firms & Nurseries



Just Think! Fresh Berries All Summer and Fall from Your Own Garden!

LONG'S "Own-Grown" Giant Everbearing Strawberries

Luck was with me last summer. My strawberries "done noble." Besides setting a fine crop of fruit, the plants produced runners and new plants freely. So for the first time in years I shall probably have enough of these nice, healthy plants for all orders up to May 15th, perhaps even later.

Plants dug fresh daily and brought direct from the field to the packing room. Safe delivery of plants in good growing condition guaranteed. Old plants always discarded. Only new plants, produced summer of 1929, sent to customers.

LONG'S "Own-Grown" MASTODON EVERBEARING

Plants very robust and thrifty and begin bearing late in July or early August, continuing until heavy freezing weather.

The dark-green leaves are very large and of heavy texture, thus well protecting the berries from sun and rain. The berries are borne in clusters on strong, stiff stems. Some of the larger berries will not go through the top of a quart milk bottle.

Mastodons are now so well known that little need be said in way of description and recommendation of them. The important matter now is to get true stock free from disease. All my plants have been officially inspected and approved. "Not a rogue in a carload."

PREPAID PRICES FOR MASTODON PLANTS: 25 plants (Smallest order packed) for \$1.00; 50 for \$1.50; 100 for \$2.70; 200 for \$5.00; 300 for \$7.00; 400 for \$9.00; 500 for \$10.80; 1,000 for \$20.00; 2,000 for \$38.00. Prepaid within 4th zone. Add 10% to these prices if prepaid beyond 4th zone.

MASTODON PLANTS BY EXPRESS—NOT PREPAID: 1,000 for \$17.00; 2,000 for \$32.00; 3,000 for \$45.00.

LONG'S "Own-Grown" Pride of Denver EVERBEARING

A strong growing, vigorous strain of everbearers, originated by G. W. Huber, Denver. Berries of fine flavor, large but not so large as Mastodons, though decidedly larger than the well known Progressive. Begin setting fruit a little earlier than Mastodons.

PRICES: SAME AS GIVEN ABOVE FOR MASTODONS.

We dig and sell strawberry plants in the spring only. No orders filled in summer or fall. I plant all mine in the spring.

How to Grow Strawberries

No one can lay down certain rules for success, but if you will turn to page 54 and read suggestions given there, you will succeed if your growing conditions are at all favorable. Additional suggestions will be sent with each order of strawberry plants.

One of My Specialties—Large, Lovely Pansies

PANSY PACKET DISCOUNTS: (Any two 40c Pkts. for 75c; 3 for \$1.00.) (Any two 25c Pkts. for 45c; 3 for 65c; 5 for \$1.00.) (Any two 15c Pkts. for 25c; 5 for 60c; 9 for \$1.00.) (Any three 10c Pkts. for 25c; 7 for 50c; 15 for \$1.00.)

You can't blame me for enthusing over such beautiful pansies! For years I've kept in touch with the best pansy growers in the world, securing their improved strains to add to my already famous stock.

If you buy just one packet I'd suggest my **SUPER-GIANTS, MIXED**, because it contains so many of the finest varieties—such a variety, all in the one mixture. Notice the recent additions to my list, such as the Swiss Giants, Ruffled, Triumph of the Giants. These with the better known favorites, Masterpiece, Giant Bugnot, Pres. Carnot, Pres. McKinley, etc., leave little to be desired in the realm of Pansies.

Super-Giants, Mixed Colors

P1. Year after year I've selected the finest plants for my seed producing plots until I've made this a most marvelous mixture—size, color, markings, that you may never have seen or believed could be found in one pansy mixture.

Another feature—one that I've never mentioned before—is that having been grown at this mile-high altitude for so long, these **SUPER-GIANTS MIXED** bloom remarkably early from spring sown seed. If sown when you do your early April gardening, this seed should produce blooms in June, the plants continuing to bloom till way after first fall frosts. And with a little protection over winter they will burst into bloom again the following spring.

Prices for Super-Giants Mixed: Pkt., 25c; ¼ oz., \$2.70; ½ oz., \$5.00; oz., \$9.00.

Swiss Giants, Mixed

P14. Flowers of large size, great substance, most novel color combinations, never before found in pansies. Plants robust in growth. This strain makes very little seed, and can never be very cheap. Pkt., 40c.

Swiss Blue Pansies

P15. A blue different from any other blue or near-blue in pansies. Very distinct and beautiful. Center darker. Pkt., 40c.

Swiss Cardinal Shades

P16. Another outstanding and very rare color in pansies. Pkt., 40c.

Ruffled Giants

P17. A selected strain of the Masterpiece type. The petals of the giant flowers are so ruffled and curled as to give the appearance of being double. A variety of colors, the rich dark shades predominating. (For type or form of Ruffled Giants refer to the middle pansy on front cover page.) Pkt., 25c.

Triumph of the Giants

P18. Originated by H. Mette of Quedlinburg, Germany. The giant blossoms are held high above the foliage on long stems. Petals curled and overlapping. Colors rich, running largely to tones of red, brown, copper, deep yellow, with darker centers. Pkt., 25c.

Light Blue—Adonis

P19. A fair idea of this variety may be had by referring to the lower pansy at the left on cover page. Light blue with lighter margin. Good size. A favorite always. Pkt., 15c.

Darkest Blue Pansy

P20. PRINCE HENRY. Rich deep blue. Large. Wonderful effect if full bed of these. Pkt., 15c.

PANSY POINTERS. Turn to page 52 for helpful suggestions on how to grow finest pansies.

Some Other Fine Pansies

P2. LARGE FLOWERING. Mixed. Pkt., 10c; ¼ oz., \$1.00.

P4. JET BLACK. Medium size. Pkt., 10c.

P5. WHITE. Large. Pkt., 10c.

P6. GOLDEN YELLOW. Large. Pkt., 10c.

P7. MAD. PERRET. Lovely shades of pink and rose. Pkt., 15c.

P8. GIANT MASTERPIECE. (Spencer Pansies.) Many petals curled; flowers appear double; mostly dark, velvety shades. Mixed. Pkt., 15c.

P9. GIANT BUGNOT. Shades of red, bronze, and reddish cardinal. Mixed. Pkt., 15c.

P10. PRESIDENT CARNOT. White ground with five rich violet blotches. Pkt., 15c.

P11. PRESIDENT MCKINLEY. Rich glowing yellow, each petal blotched with deep reddish brown. Pkt., 15c.

P12. BRONZE. Bronze and brown shades predominate, but many do not come bronze. Pkt., 10c.

Outdoor Pansy Plants

(BETTER READ THIS TWICE!)

Grown from my **SUPER-GIANT MIXED** seed. Plants offered in mixed colors only. If want any other kinds, buy the seed, and sow in your garden, or start indoors and transplant.

Please note that these plants are not grown under glass. Excepting the very latest sown bed they have had no winter protection at all. Just left to rustle for themselves, like winter wheat in a field.

What I'm after are good strong fibrous roots for these plants. It's the roots that count. Tops develop fast in your garden if roots are strong. Appearance of these plants, when shipped, varies a great deal, depending on how much the tops have grown before plants taken up. The earliest shipments made while plants look pretty "rough and ready". Later tops greener and larger, but plants no better for setting out.

100 Plants \$2.00, Prepaid

This special price is for what I call the **Transplanting Size**. They may not be quite ready to show buds, or they may have some buds and some blossoms showing. Depends on the season and how early shipped. **But all come into bloom very soon** after planted in your garden. Best buy is to take the **Transplanting Size**. More pansies for the money. And as good as the larger plants sold in bloom for twice the price.

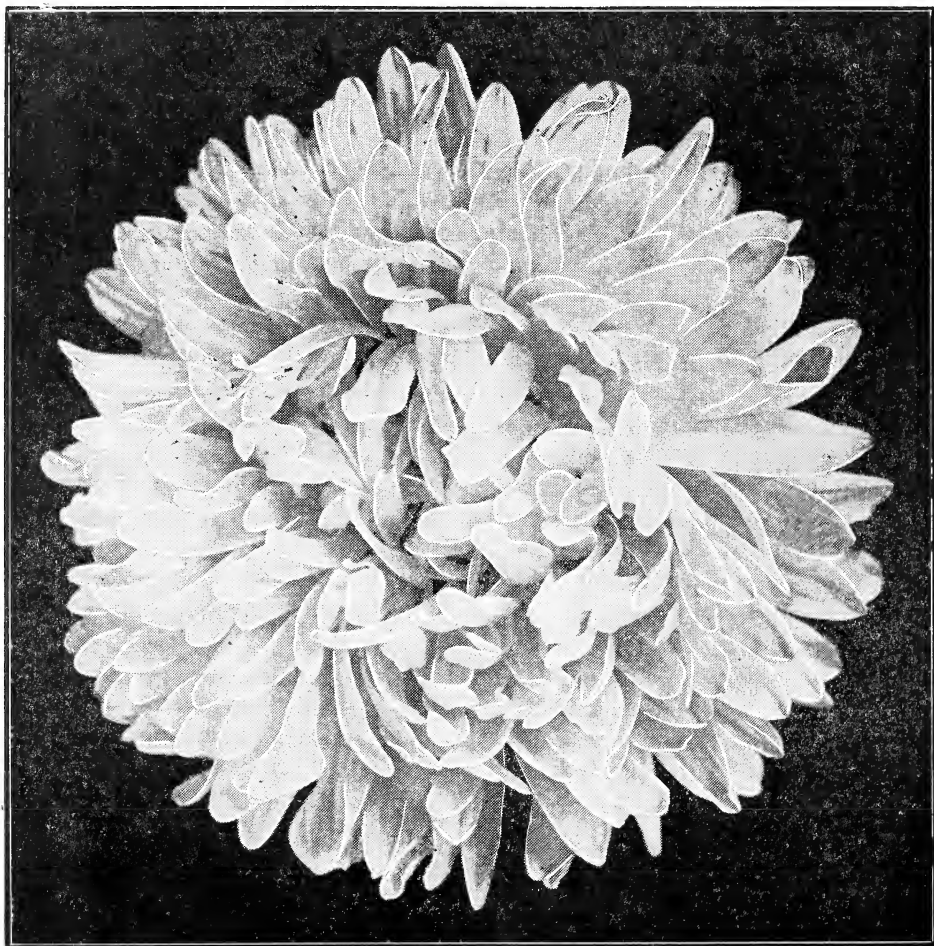
Prices: These smaller plants, 40 for \$1.00; 100 for \$2.00; 200 for \$3.90; 300 for \$5.70; 500 for \$9.00, prepaid within 6th zone. (See notice below.)

Pansy Plants In Bloom

Better buy the transplanting size a little earlier. You'll have blooming plants in a short time. Can be set out again, after bloom, if you wish. If wanted in bloom for Decoration Day, set the transplanting size out in April or early May.

Price for pansy plants in bloom, mixed colors only: 14 for \$1.00; 40 for \$2.00; 100 for \$4.00.

Notice: All pansy plants shipped prepaid and safe delivery guaranteed (anywhere within 6th zone). Prefer not to ship farther, but if do it will be by express, **YOU pay express**.

LONG'S Giant Exhibition Asters**Boulderado Beauty**

Form or type of flowers illustrated above. Plants very vigorous, 30 to 36 inches tall. Flowers, immense and fully double, are borne on long, strong stems, and last two to three weeks after cutting.

A20 Shell Pink**A22** Lavender**A24** White**A21** Rose Pink**A23** Purple**A25** Mixed

Price for any color or mixed: **Pkt., 10c;**
 $\frac{1}{4}$ oz., 50c.

Early Royal Asters

A strain of **Early Giant Asters**, especially valuable for cut flowers on account of their long, strong stems that are almost free from side branches. Same form as **Boulderado Beauty**, but not so large.

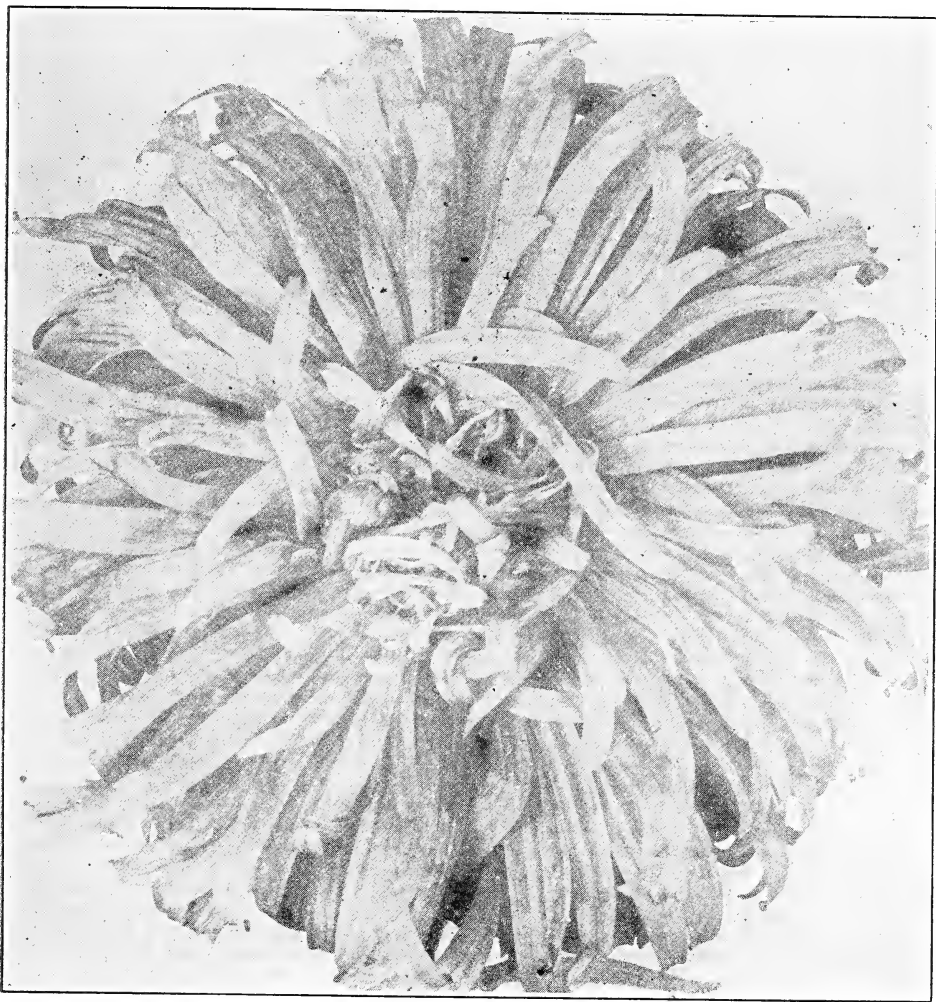
A2 White**A4** Shell Pink**A6** Lavender**A3** Purple**A5** Rose-Pink**A7** Mixed

Price for any color or mixed: **Pkt., 10c;**
 $\frac{1}{4}$ oz., 40c.

SPECIAL: Any 7 Ten-Cent Pkts. **ASTERS** listed on this page and the opposite page, for 50c. Any 15 Pkts. for \$1.00. Alike or assorted, your selections.

MORE ABOUT ASTERS. Turn to bottom of page 53 for aster suggestions. Asters are so easy to grow from seed sown right out in the garden that I don't urge the buying of plants, though offer them on page 8. Make first sowing when you do your early gardening, early April here. Avoid spasmodic watering of your aster bed. Water only moderately, but about the same each time and regularly. It is now pretty generally conceded by experts that the "Yellows" in asters is caused by leaf hoppers. No remedy or prevention, except protecting plants with cheese cloth to keep the hoppers out. But the hoppers don't seem to work in partial shade as much as in full sunshine.

New "California Giants" Asters



The long strong stems carry flowers of largest size, heavy substance, with long graceful petals attractively curled and twisted. It is truly an aristocrat vying with the chrysanthemum in size of flower and long stem. Very late. (A30. White.) (A31. Rose-Pink.) (A32. Lavender) (A33. Purple.) (A36. Mixed.) Any color California Giants, or Mixed, for 15c Pkt. 2 Pkts., 25c. 9 Pkts., \$1.00.

Crego-Asterum Asters

Both the shaggy type, like Giants of California. Little earlier but not so large. The two strains combined, in following colors, also mixed colors: (A8. White.) (A9. Rose-Pink.) (A10. Shell-Pink.) (A12. Lavender.) (A13. Mixed.) Choice, Pkt., 10c; ¼ oz., 50c.

Giant "Peach Blossom" Aster

A14. Similar in type to Boulderado Beauty. Stems stout and long. Flowers large. Color suggests its name. Pkt., 10c; ¼ oz., 50c.

LONG'S Special Mixture

A1. To make this superb mixture I've used the kinds best for cutting—plenty of best white and pinks. Pkt., 10c; ¼ oz., 50c.

Fancy Yellow Aster

A15. There is no deep yellow in aster. But here's a light yellow, that will help some. Pkt., 10c.

Everlasting Aster

A16. Color flesh-pink. It resembles a large Straw Flower. When cut and dried it retains its color and shape. Pkt., 10c.

LONG'S Giant Flowered Spencer Sweet Peas

Large blossoms, often 4, on long stems. Edges of blossoms usually waved or frilled, giving an added charm to this popular flower.

3 Pkts., 25c; 4 or More Pkts. at 8c Each

½ Oz. at Oz. Rate

SP0. AUSTIN FREDERICK. Many sweet pea fans consider this the best lavender to date. Extra large and fine. Pkt., 10c; oz., 40c.

SP1. BARBARA. Superb salmon. Pkt., 10c; oz., 30c.

SP2. BLANCHE FERRY. Pink and White Spencer. Pkt., 10c; oz., 30c.

SP3. BUTTERCUP. Best cream or primrose. Pkt., 10c; oz., 30c.

SP5. CONSTANCE HINTON. Finest exhibition White Spencer. Pkt., 10c; oz., 40c.

SP6. COUNTESS SPENCER. The original Spencer. Clear pink. Pkt., 10c; oz., 30c.

SP8. DEFIANCE. Very large orange-scarlet, absolutely sun-proof. Often 4 large wavy blooms on stem. Pkt., 10c; oz., 40c.

SP9. ELFRIDA PIERSON. Large and lovely shell pink, tinted salmon. Pkt., 10c; oz., 30c.

SP10. GEO. SHAWYER. Giant salmon-rose. Pkt., 10c; oz., 30c.

SP11. HAWLMARK PINK. Rich, bright, rose-pink, flushed salmon. The richest colored sweet pea. Pkt., 10c; oz., 40c.

SP12. HEAVENLY BLUE. New large brilliant delphinium-blue. Pkt., 10c; oz., 40c.

SP13. HERCULES. Mammoth rosy pink. Improved Countess. Pkt., 10c; oz., 30c.

SP14. KING EDWARD. The finest pure red Spencer. Does not burn in sun. Pkt., 10c; oz., 30c.

SP15. KING WHITE. Large blossoms of purest, glistening white. Pkt., 10c; oz., 30c.

SP16. MRS. HITCHCOCK. Pale pink, flushed salmon on cream ground. Pkt., 10c; oz., 30c.

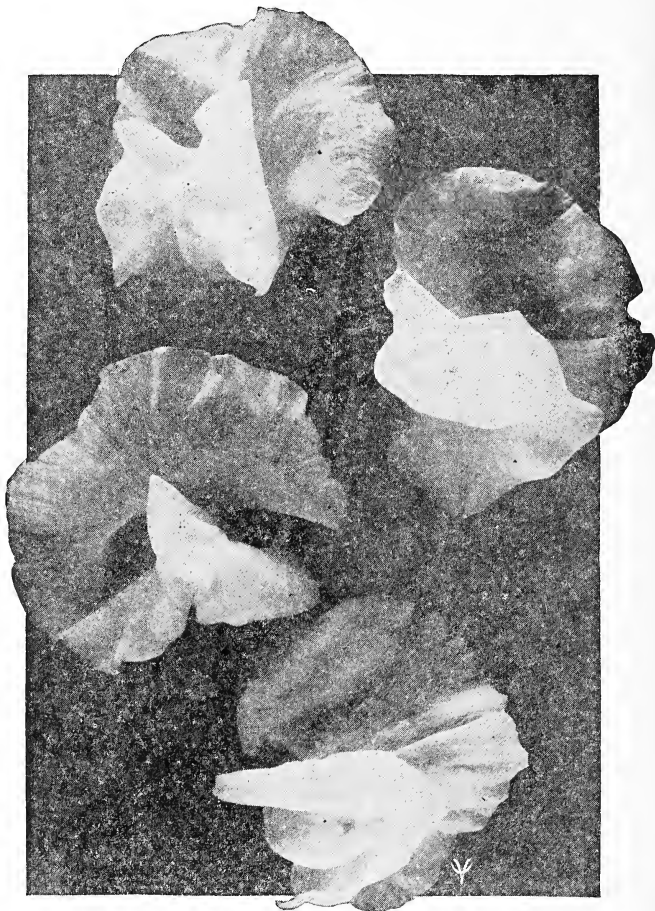
SP17. LORD NELSON. Splendid navy blue Spencer. Pkt., 10c; oz., 30c.

SP19. MARY PICKFORD. Very fine. Dainty cream-pink, lightly suffused salmon, the effect most charming. Pkt., 10c; oz., 40c.

SP20. MARGARET ATLEE. (Improved.) Extra large flowers of rich glowing pink, suffused with salmon. Pkt., 10c; oz., 30c.

SP21. MASTERPIECE. Large clear lavender, slightly flushed rose. Pkt., 10c; oz., 30c.

SP22. MRS. TOM JONES. Discontinued. Heavenly Blue is better.



SP23. NUBIAN. (Improved.) Deep maroon. Pkt., 10c; oz., 30c.

SP24. ORCHID. Lavender, suffused pink. Pkt., 10c; oz., 30c.

SP25. PICTURE. Cream and pink shades, blended. Pkt., 10c; oz., 30c.

SP26. FINKIE. See opposite page.

SP27. ROSABELLE. Large light rose. Pkt., 10c; oz., 30c.

SP28. ROYAL PURPLE. Rich rosy purple. Large and fine. Pkt., 10c; oz., 30c.

SP29. ROYAL SCOT. True scarlet. Pkt., 10c; oz., 30c.

SP30. TANGERINE IMPROVED. Almost tangerine-orange. Pkt., 10c; oz., 30c.

SP31. THE CARDINAL. Intense poppy scarlet. Extra fine. Pkt., 10c; oz., 40c.

SP32. WINNIE MORSE. See opposite page.

SP35. YOUTH. Large white, pink, picotee edges. Pkt., 10c; oz., 30c.

"LOVELY 'LEVEN" COLLECTION of Spencer sweet peas. Big value. See page 5.

LONG'S Famous Spencer Sweet Peas

"Early Bird" Spencers

These new "Early Bird" Spencers are the kind the florists grow in greenhouses, but they do splendidly in the open garden also. Order some "Early Birds" along with your usual sweet pea favorites and try them out. They'll 'sprise you some morning by showing color much sooner than you have been used to looking for first sweet pea blossoms.

(Half ounce at ounce rate)

SP80. AMETHYST. Rich royal purple. Pkt., 10c; oz., 50c.

SP82. AVIATOR. Dazzling crimson-scarlet. Pkt., 10c; oz., 50c.

SP83. GLITTERS. Combination of bright fiery orange and deep orange. Pkt., 10c; oz., 50c.

SP84. LAVENDER KING. Lovely true lavender throughout. Pkt., 10c; oz., 50c.

SP85. ROSE QUEEN. Pleasing shade of rich pink with suffusion of rose. Pkt., 10c; oz., 50c.

SP88. SNOWSTORM. (Improved.) The largest and finest extra early White Spencer. Pkt., 10c; oz., 50c.

SP89. ZVOLANEK'S ROSE. Giant rose-pink. Considered by most florists as best deep pink. Pkt., 15c; oz., 60c.

SP90. "EARLY BIRD" MIXTURE. A superb mixture of these extra early flowering Spencer sweet peas. Pkt., 10c; oz., 40c.

LONG'S "33-in-1" Spencer Mixture

SP41. In this mixture you get the best of up-to-date Spencers. I use 33 different named varieties. Of course you might not get all 33 kinds in a 10-cent packet—possibly not in an ounce—but they are all in this mixture. It is my ambition to make this the finest Spencer mixture offered this season. Pkt., 10c; oz., 30c; 2 oz., 50c; ¼ lb., 90c; 1b., \$3.00.

"Lovely 'Leven" Spencers

'Leven 10c Pkts. for 75c

From over 25 of my splendid named varieties of giant Spencers, I'm going to select eleven that will cover practically all the main colors, tints and shades, giving you a regular 10-cent packet of each these "Lovely 'Leven". Then just for good measure, I'll throw in a 10-cent packet of my "33-in-1" mixed Spencers, and make the price only 75c for all.

Please note carefully that to get this special price you must take the assortment as it is put up. You cannot specify certain varieties at this price. These assortments will be put up in advance—a lot of them—ready to send out without any further attention. Just say, "Lovely 'Leven" for 75c, and you will get our own assortment, which will indeed be lovely.

Larger Lot "LOVELY 'LEVEN". For \$1.50 I will send you a half ounce each of these Spencers, my selection, with half an ounce "33-in-1" mixed Spencers thrown in for luck.

LONG'S Special Mixture

SP43. My mixture that has given such splendid satisfaction for a moderate price. It includes the best of the grandiflora varieties, a "right smart" of Spencers, and a sprinkling of extra early kinds, the latter coming so early that they spring a delightful surprise on you before you are looking for first blossoms. Pkt., 10c; oz., 15c; 2 oz., 25c; ¼ lb., 40c; 1b., \$1.35.

SP39. CUPID SWEET PEAS. Mixed. Pkt., 5c; oz., 20c.

Perennial Peas

SP60 White. SP61 Pink. SP62 Red. SP63 Mixed. Pkt., 15c.

Two Lovely New Spencer Sweet Peas

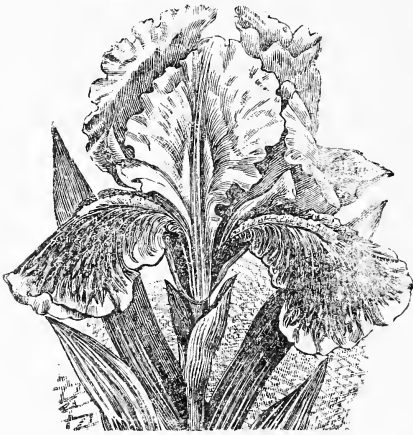
SP26. PINKIE. (Morse Origination.) The largest deep rose pink to date. Vigorous grower, continuous bloomer, with long, stout stems. Nicely waved petals. A glorious pink. Horticultural Advertiser of London, England, says: "PINKIE is the most distinct pink seen for a long time." Pkt., 10c; ½ oz., 20c; oz., 40c.

SP32. WINNIE MORSE. Another Morse masterpiece. Flowers mostly duplexed and delightfully frilled. Color is cream ground, flushed soft rose pink. The effect when bunched is most pleasing. Price reduced from 25c to 15c a packet for 1930. 2 Pkts. for 25c. Half ounce for 40c.

Many Spencers Included In **LONG'S** Special Mixture

"How To Grow Finest Sweet Peas"—See page 63.

LONG'S Superb Iris



Splendid Named Varieties

Healthy stock, grown in sunny Colorado, an ideal iris climate. Standard divisions, all guaranteed true to name.

All Iris Priced Prepaid Anywhere in U. S.

***AMBASSADEUR.** A remarkable French variety. Standards bronzy-violet. Falls rich velvety red-violet. Each, 35c; (4 for \$1.00); (25 for \$5.00).

***ANNA FARR.** Flowers white, bordered pale blue. Each, 30c; (5 for \$1.00); (25 for \$4.50).

***BLACK PRINCE.** The true Perry origination. Standards intense violet-blue. Falls black-purple. Each, 30c; (5 for \$1.00).

***DREAM.** Standards and falls both lilac to Chinese violet. Classed as pink. One of the finest in this color. Each, 25c; (7 for \$1.00).

***KOCHI.** Both standards and falls rich velvety-purple. Early. 3 for 25c; (15 for \$1).

***ISOLENE.** Standards lovely rose-pink. Falls purplish-old rose with golden throat. 2 for 30c; (10 for \$1.00).

***IRIS KING.** Standards golden yellow. Falls rich velvety-maroon, bordered yellow. Superb. 3 for 25c; (14 for \$1.00); (100 for \$5.00).

***LaNEIGE.** French variety. Standards carried horizontally like the Spanish iris. 2 for 25c; (12 for \$1.00).

***LENT A. WILLIAMSON.** Very large flowers on tall, strong stems. Standards lavender-violet. Falls velvety violet-purple. The whole flower is suffused yellow, more heavily towards the center. A massive iris, vigorous in growth. Grand. 2 for 35c; (9 for \$1.00); (100 for \$8.00).

LORD OF JUNE. Standards lavender-blue. Falls rich violet-blue. Very large. Each, 50c; (3 for \$1.00).

***MOTHER OF PEARL.** Both standards and falls iridescent shades of mother of pearl. Large flowers on tall stems. Each, 35c; (4 for \$1.00); (25 for \$5.00).

MRS. NEWBRONNER. Rich golden daffodil-yellow. 3 for 25c; (12 for \$1.00).

ORIFLAMME. Standards dark lavender. Falls hortense-violet. Edges of the sweetly-scented blooms are daintily waved. 2 for 25c; (12 for \$1.00).

SOUV. de MADAME GAUDICHAU. Standards violet-blue. Falls velvety black-purple. Each, 50c; (3 for \$1.00).

SWEET LAVENDER. Standards French-gray lavender. Falls dark purple. Each, 50c; (3 for \$1.00).

WHITE KNIGHT. Strong growing plant with pure white blossoms. 2 for 25c.

Large Lots at Low Prices

Dealers, commercial growers, clubs, and others who can use large lots of Iris please write me for special **Large Lot Prices**. Send list of kinds and quantities wanted, and I'll make you prices, either delivered or f. o. b. Boulder. Varieties preceded with an (*) I can supply in large lots, and in planting sizes as well as standard divisions.

Important To Iris Lovers

There's a growing tendency among Iris "Fans" and commercial growers to buy and plant Iris roots in July and August, instead of waiting till fall.

Now, as I've repeatedly said, you can plant Iris in early spring, or any time in fall till ground freezes, with good results. But it is true that by planting in August or last of July your plants will become so well rooted and established in their new location that large, lovely blooms are practically assured for the following spring. Also, you often get more increase in next season new divisions, than if planted very late in fall. This is especially important if you wish to increase your stock of rare and expensive varieties for selling while prices are still high and remunerative to the grower.

To be sure, the new divisions you get in July and August will be smaller than if left to grow some weeks longer in the original clump, and sent to you later in the fall. But the smaller divisions might as well grow in your own garden as anywhere else. And, as I've said, they will, at the same time, be making elaborate preparations for blooming and increasing the number of roots for the following year.

Now then, here's the important idea: My fall catalogue, listing Iris, along with other roots, plants and bulbs, is sent out about Sept. 1st—too late to give you a chance to order in July and August. To send just the Iris folder in July to all on my mailing list would be too expensive. This is a real problem. Yet the solution is very simple, if you will do just this: If you have any idea at all that you might wish to plant Iris before Sept. 10th, please drop me a line asking me to put you on my **SPECIAL IRIS MAILING LIST**. Then I'll send you the Iris list, soon as ready, early July.

In addition to the varieties offered for this spring in opposite column here, I expect to have stock to spare of the following, many of these rare and much wanted by Iris lovers:

Asia	Magnifica
Brandywine	Moa
Bruno	Morning Splendor
Candlelight	Opera
Cardinal	Odorloc
Conquistador	Rowla
Freida Mohr	San Francisco
Gaviota	San Gabriel
Glowing Embers	Santa Barbara
Gold Imperial	White Knight
Imperator	Wm. Mohr
Lady Foster	Zua

NOTICE: None of these for sale this spring. All are planted out and will not be taken up before July.

AGAIN I SAY: We both lose if you want any Iris on this page next July or August. You will be surprised and pleased at my low prices on these rare kinds. So to make sure getting the list, send me your name and full address now—the sooner the better—before "Andy 'n' Amos" or other attractions, or distractions, cause you to forget about this. That's the idea. **"Do it now."**

Peony Roots Next Fall

Delightful Delphiniums

After careful study I've changed my ideas somewhat regarding the very densely covered spikes of the Wrexham or "Hollyhock" type. A few of these in an assortment or mixture are very worthy and interesting. By themselves, they are also massive and impressive. But I'm inclined more and more to the types that are more open or branching, with an airy, graceful placement of side spikes and blossoms. These, of course, with flowers of large size and loveliest colors and combinations of colors.

As you know, Delphiniums run largely to blue tints and shades. Not so long ago we had only the solid light blue and dark blue. Now we get an amazing and delightful variety of blues, many in combination with lilac, lavender, heliotrope, and near-pink. And the types or forms are as varied as the colors, many blossoms with a double set of petals instead of just one, the two sets often different in color.

So far I've not segregated the different types or colors, nor saved seed in separate colors or shades. May do this some time. But it seems most fascinating to me to let them grow and bloom in masses of the various colors, all harmonizing. So that is the way you will have them from seed or plants I supply this season—all in one grand and glorious mixture, including largely the more graceful open type plants, but some also of the massive Wrexham or "Hollyhock" strain.

F012. Seed saved from my best stock or exhibition plants: Pkt., \$1.00; Small Pkt., 50c; ¼ oz., \$2.50; oz., \$9.00.

Delphinium may be sown right outdoors early in spring. With no protection, the plants will live over winter and increase in size and vigor.

Each season I am surprised at the possibilities of getting many splendid delphinium blooms the first year, from seed sown right out in the garden in April. Last year I sold thousands of fine spikes of this popular flower from plants grown in beds sown last spring. Seems too good to be true, but can be done, if season about like ours here at Boulder.

Delphinium Plants

From seed containing a liberal percent of the fine new kinds. Strong seedlings, many of which bloomed last year. Prices very reasonable. 3 (smallest order packed) for 60c; 7 for \$1.00; 15 for \$2.00; 33 for \$4.00. All prepaid. (Mixed colors only.)

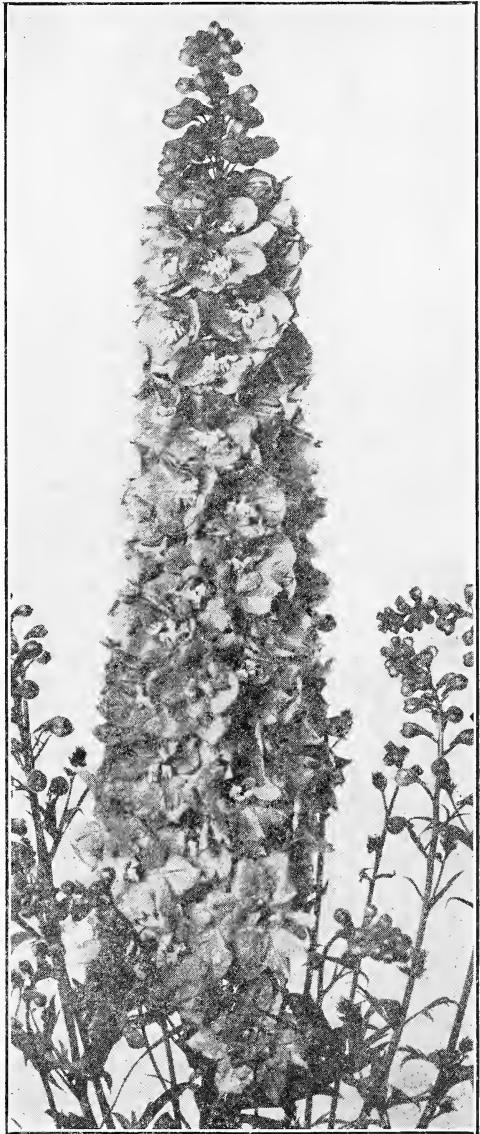
Note: Delphiniums are very hardy. They begin growth real early in spring. Is best to set these plants out when you do your early gardening. But will thrive if shipped and planted later. If sent after growth well started we cut the tops back before packing. New shoots start at once from crown of plant. **But order and plant early if you can.** Means better results the first season.

Delphinium Seed for Fall

Sow in August and early September, and you should have nice seedling plants that will winter over with little or no protection. Such plants should bloom next year. You may order new crop seed any time next summer and fall. Seed will be mailed just as soon as ripe and cured. Prices same as for this spring.

Cheaper Delphinium—Page 12

Fester the Pests. Only insect I know of that works on Delphinium is some sort of red spider, louse or other "varmint" very efficient in "mass production." Shoot him in the eye first time you see him—shoot his wife and children, too—with some tobacco solution. See page 58.



Wrexham or Hollyhock Type

All right. You can't quarrel with me. Although I myself prefer the less dense and more airy-like "Dels", as we call 'em for short, yet I receive requests for the Wrexham type only.

This type really is fine, and great for exhibition. But heavy. Should be staked.

Now, as I say, it's jake with me whether you order my super special mixture offered on the left here, or the Wrexham type only, for this season I have seed of both. A typical Wrexham spike is shown above. But this type varies a great deal. Not all come so dense or crowded. And it's a good thing they don't.

F011. Wrexham seed at 80c a Pkt. Small Pkt., 40c; ¼ oz., \$2.00; oz., \$7.00. (No Wrexham plants. Just seed this year).

Godetia—New Varieties

The Godetia (Satin Flower) is a hardy, easily grown, annual little known, yet one of the most pleasing of outdoor summer flowers. The last time I was in California, I selected several of the newest and finest Godetias from acres of these charming flowers then in bloom. Just sow the seed outdoors any time when you do your usual spring gardening. Cover seed about $\frac{1}{4}$ inch thin to 8 inches.

F070. GODETIA, DWARF AZALEA-FLOWERED. About one foot high. Bushy plants covered with loveliest double rose-carmine flowers. Something you'll be proud to see in your garden. Pkt., 15c; 2 pkts., 25c.

F071. GODETIA, TALL GLADIOLUS-FLOWERED. Plants about 18 inches tall, which produce flower spikes much like the gladiolus, only much more graceful. The closely set double carmine flowers open along the spike same as glads, either in garden or after being cut. Splendid for cutting. Pkt., 15c; 2 pkts., 25c. (You may take one each the dwarf and tall listed here for 25c. Good idea to plant both.)

GODETIA, FINE MIXED. See page 14.

Tall Annual Larkspurs

Early sowing best. Forget the dwarfs. The new tall varieties are certainly fine. Easily grown from seed sown outdoors. Give each plant at least 6 inches in the row. Plants 2 to 3 feet tall. Continue to bloom long time. Very effective in borders and planted amongst shrubs. Splendid for cutting, and last well. Here are the finest varieties in separate colors that I selected from blooming fields grown by specialists in California.

F075. AGERATUM BLUE.

F076. BRIGHT ROSE.

F077. DARK BLUE.

F078. EXQUISITE PINK.

F079. LUSTROUS CARMINE.

F080. SCARLET ROSE.

Any of these 6 delightful colors at 10c a pkt.; 3 pkts., 25c; 6 pkts., 45c.

MIXED ANNUAL LARKSPUR. See page 15.

Long's Aster Plants

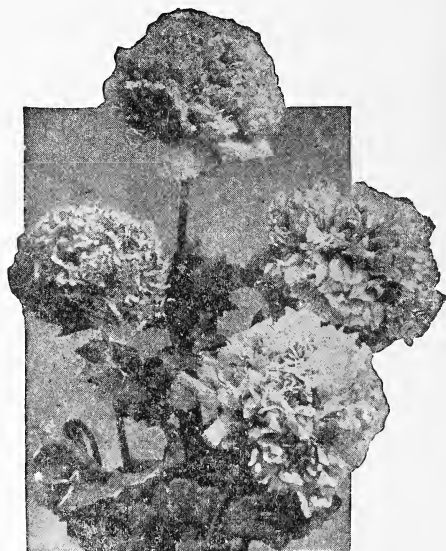
(Not Mailed Beyond 5th Zone)

Orders for plants are taken with the understanding that the plants will be sent when ready for setting out, the time depending on the season. Ready about June 1st. Now when I say "about June 1st," I'm something like the old maid who told the census taker she was "about 30 years old". Some seasons the plants are not ready until the 10th to 15th of June. If you wish them earlier you can buy the seed and start them indoors. Bear in mind asters do well sown right outdoors any time from middle of April to last of May.

MIXED ASTER PLANTS. Popular cut flower mixture. 16 plants (smallest quantity sold). 50c; 45 for \$1.00; 110 for \$2.00; prepaid.

PLANTS IN SEPARATE COLORS. White, Pink, Lavender and Purple. Your choice, 12 (smallest quantity sold), for 50c; 33 for \$1.00; 80 for \$2.00; prepaid.

Note: No certain type or variety aster plants. If want certain kinds, buy the seed.



Peony-Flowered Poppies

Gigantic blossoms like fine double peonies. Rich colors. Easy to grow. Sow outdoors. Thin to 6 inches. Shrimp Pink, Red, or Mixed colors. Choice, 10c Pkt. (The Shrimp Pink is exceptionally fine.)

Anemone Bulbs

Plant the bulbs any time from early spring to middle of June. The plants grow 8 to 12 inches high. Several flower stems come from a small bulb. Flowers are bright colors in mixture, some single, a few double, and several inches in diameter.

The Anemone bulbs are very peculiar. Dry, hard and apparently lifeless. But respond quickly when planted two inches deep in any good garden soil. Set the bulbs 4 to 6 inches apart. No special culture required. In fall, take up bulbs and store in a dry place, replant the next spring.

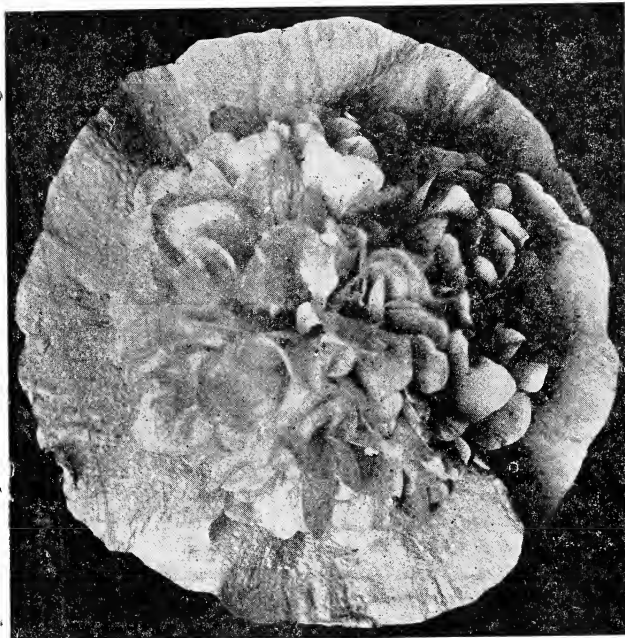
Price for these funny little bulbs that produce such a wealth of bloom: Doz., 40c; 50 for \$1.50; 100 for \$2.90, prepaid.

Ranunculus Bulbs

Nothing produces a brighter effect than a bed of Ranunculus. The flowers are wonderfully good for cutting, also. Plants about a foot high with flowers two inches or so in diameter, many of them double, in a variety of bright and pleasing colors.

The bulbs are even funnier in appearance than those of the Anemone. They look like dried up bird's feet and of no value whatever. You'd swear they would not grow, much less produce beautiful flowers. But just plant them out in the garden any time after ground warms up and see them do their stuff. Set these little "crowfoot" bulbs about two inches deep, pressing them firmly in the soil.

Space the bulbs 5 or 6 inches apart, though may be a little closer. Just cultivate and water moderately. Easy to grow. In fall take up the bulbs, store in dry place away from frost. Replant the next spring. Prices: doz., 40c; 50 for \$1.50; 100 for \$2.90, prepaid.

LONG'S Rare Double Hollyhock, "Lilac Beauty"

I don't claim the honor of originating this splendid addition to the Hollyhock family. Found it in a mixture a few years ago. Liked it so well that I saved the plant and increased stock to add to my list.

Had never seen this color listed in catalogues. Later I found it offered by an English firm from whom I bought seed but their strain not so good as mine. The seed and plants I offer are from my own stock.

Not sure that Lilac is just the name for the color. Using Ridgeway's color chart, I found Chinese Violet seemed nearest to color of blossoms on my plants last summer. Anyhow, it's a beauty, and different in color from anything I've offered before. Not quite so double as blossoms shown on this page.

"LILAC BEAUTY" PLANTS: Year old, field grown. 2 for 60c; 5 for \$1.00; 11 for \$2.00. Prepaid.

You gain a year by planting roots this spring instead of seed. Hollyhocks bloom second year from seed, you know.

It's a good idea to plant both roots and seed. The roots frequently live over after blooming one season, but not always. The seed you sow this year will provide a new supply of blooming size roots for next summer. Sow seed from April to July. Plant roots early in spring. April best time.

"Colorado Sunset" Hollyhock

Color varies from copper to cream, but always charming. Prices for seed and plants reduced this season. Same price as Red, Pink, etc.

Double Hollyhocks**Six Other Colors**

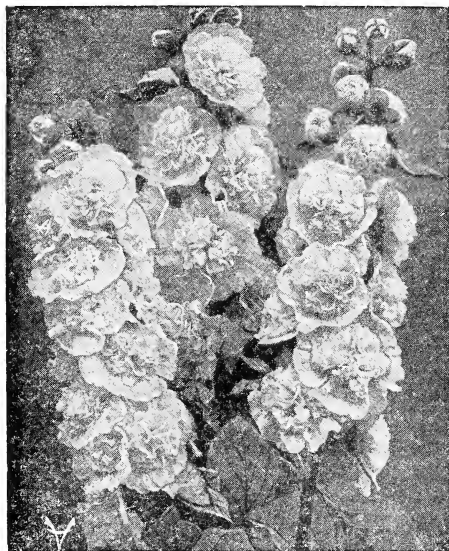
Their double blossoms rival the rose in exquisite color and form.

Bloom second year from seed; first year from roots I sell. Plant roots early for best results. Red, White, Yellow, Maroon, Newport Pink, Black, "Colorado Sunset".

Roots: 3 for 50c; 7 for \$1.00; each color labeled. Mixed colors, our selection, not labeled: 10 for \$1.00. All prepaid.

Seed: Any color, including "Colorado Sunset": Pkt., 10c; $\frac{1}{4}$ oz., 40c; oz., \$1.20, prepaid.

"LILAC BEAUTY" SEED: Pkt., 10c; $\frac{1}{4}$ oz., 40c; oz., \$1.20.

**Double Hollyhocks**

"Rival Roses in Color and Form"

LONG'S Superb Petunias

F024. ROSY MORN PETUNIA. A gay and artistic petunia for beds and borders. Color soft rose-pink with light throat. Plants set a foot apart in good soil will fill all the space with perfect mass of bloom, beginning about 60 days from sowing and never letting up until frosts. Pkt., 10c.

F025. VIOLET PETUNIA. Similar in bushy habit of growth to Rosy Morn, but a beautiful deep violet color. Very rare. Pkt., 10c.

Giants of California

The largest often measure 4 to 4½ inches across. And such wonderful colors and markings! Then too, some are delightfully ruffled and frilled. Produces very, very little seed, making the seed as precious as gold dust. Pkt., 25c.

Balcony Petunias

Large flowering single sorts especially recommended for window boxes.

F060 Balcony White. **F061** Balcony Blue. **F062** Balcony Rose. **F063** Balcony Crimson. **F064** Balcony Mixed. Any color or Mixed. 20c Pkt.

Chinese Wool Flower

Flowers resemble a ball of wool. Plants branch freely and are covered with blooms. Very striking for garden display. **Can be dried for winter bouquets.** Sow in garden about May 1st or start indoors.

F026 Crimson. **F027** Rose-Pink. **F028** Yellow.

F029 White. **F030** Mixed. Price any color or mixed: Pkt., 10c. (**F026** and **F027** are best.)

Giant African Marigolds

These marigolds belong to the tall growing, double "pin-cushion" class of the popular marigold. My seed was grown by a specialist, who has bred these two colors up the nearest to perfection that has so far been attained. Most of them come double, though a few come single, but of unusual shape, so that some admirers like the single even more than the double. Plants grow about 3 feet high from seed sown outdoors after ground is warm. Easily transplanted. Should be thinned to 12 inches in good ground, for they make big bushes. They bloom and bloom from mid-summer to hard frosts.

F05. ORANGE PRINCE. A beauty. Deep golden orange. Immense blossoms. Pkt., 10c.

F06. LEMON QUEEN. Equal to Orange Prince, but a soft lemon yellow, making a fine contrast. Pkt., 10c.

Hardy Perennial Blue Salvia

F051. SALVIA AZUREA. Also called "Heavenly Blue Flowering Sage". Grows 3 to 4 feet high; stately willow-like growth; produces spikes of pretty sky blue flowers in great profusion. Will bloom first season from seed sown early outdoors or started inside and set out later in spring. Lives for years. Can be transplanted in early spring without harm. Blooms in August and September. Pkt., 15c.

California Poppy, "Copper Bowl"

F035. The richest color you can imagine. Unusual, unique, very pretty. Pkt., 10c.

Hardy, Fragrant Violets

Here's one answer to that question, "What will grow and thrive in the shade?"

These hardy violets grow in shade, partial shade, or out in the open, but do best in partial shade. The plants increase in size or number by sending out short runners, which take root and make new plants around the original one, soon forming quite a nice clump. When the clumps get too large or too thick they may be taken up, pulled apart and reset.

The blossoms are of violet color, and delicately fragrant. I'm selling these violets in clumps. Each clump can be easily separated to make several dozen plants. Or, you can separate the clump into a few smaller clumps, for quicker results. There is no set rule as to this. They thrive most any way, if given good soil and reasonable care.

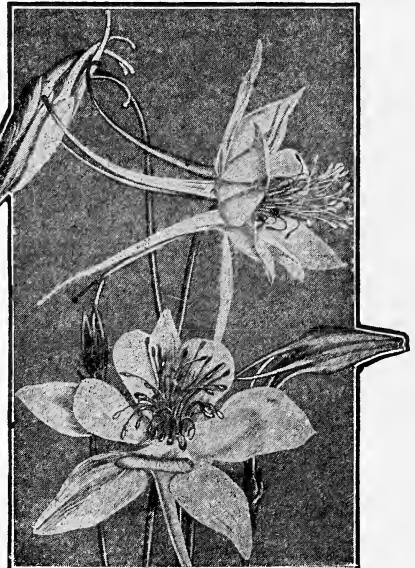
Prices: One clump, \$1.00; 3 clumps, \$2.50; 5 clumps for \$4.00, prepaid, anywhere in U. S. A.

Gaillardia Roots

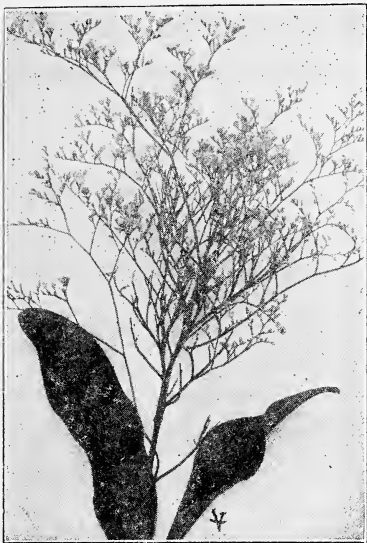
Grow and increase something like the Shasta daisy, with which the flowers combine well. If blooms are cut often the plants will continue to flower most all summer. The flowers, several inches in diameter, are a combination of red and yellow, some more red, some more yellow, than others.

Prices: Blooming size divisions from field grown clumps. Two divisions for 50c; 5 for \$1.00, prepaid.

Rocky Mountain Columbine

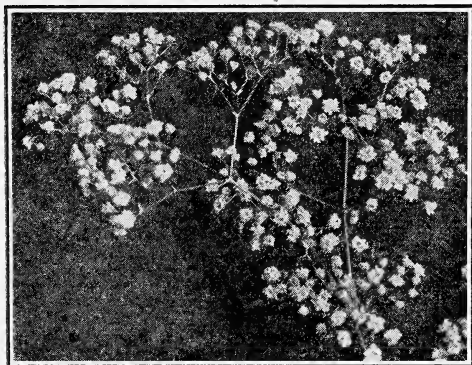


The State Flower of Colorado. Very beautiful, hardy perennial; sepals blue; petals white. Thrives in any State. Does best in partial shade. **Plant early.** Starts growth early in spring. Blooms here last of May, almost always in bloom Decoration Day. Year-old seedling roots, not very large, but should bloom some if set out early. Then will bloom profusely next year and thereafter. **Prices:** 2 roots for 50c; 5 for \$1.00, prepaid.



Statice (Sea Lavender)

F017. Very hardy **Perennial**, blooming second year from seed or first year from **strong** transplanted roots. Something like "Baby's Breath" but **blue** instead of white. **Later**, also, coming in midsummer to be used with "Glads" and other bouquets. **Seed:** 10c pkt. Extra good transplanted field-grown roots, 2 for 60c; 4 for \$1.00, prepaid.



New Double Gypsophila

F049. Great improvement over the single Gypsophila or Baby's Breath. **Perennial**, blooming second year from seed sown outdoors from April to June. Roots last for years, increasing in size. **Color, white.** About 1/4th the plants will produce double flowers. Balance single or semi-double, and may be pulled out if not desired. The double is best for drying for winter; fine to use fresh also, to combine with sweet peas and other flowers. Florists use lots of it, summer and winter. **Seed:** Pkt., 25c; 5 pkts., \$1.00. **Roots:** Mixed sizes. All should bloom. 7 for \$1.00, prepaid.

Bristol Fairy Gypsophila. Large double perennial "Baby's Breath." Field grown roots. Large size, each \$1.00, prepaid. Smaller roots, same variety, each 75c, prepaid.

New Giant Hardy Carnation



F055. The finest to date. **Chabaud's Giant**, the new strain; not the old Chabaud type. Far superior also to Marguerite. (About 85% come double.)

Plants thick-set; stalks stiff, bearing immense double blossoms. Not so large as the greenhouse kinds, but surprisingly large, especially if disbudded, as florists treat their carnations. Bloom about 6 months from sowing. Start indoors for summer blooming. May be sown also in open garden. Give winter protection.

Colors: Red, Rose-Pink, Salmon-Rose, White, Mixed. Price for any color or mixed: Pkt., 25c; 5 pkts., \$1.00.

Double Bachelor Button

Far superior to the common single strain. Fine for cutting. **F01 1/2** White. **F01 Blue.** **F02 Rose.** **F03 Mixed.** Any color or mixed: Pkt., 10c; 1/4 oz., 45c.

Geraniums from Seed

Geraniums are easily grown from seed. Sow in the garden or start indoors. Take up and pot the best plants in fall.

F033. GRAND ZONALE. Grown by Mrs. Shepherd. Mixed colors—scarlet, crimson, rose, pink, salmon, bluish, white, variegated. Pkt., 25c. (See also page 29.)

Unusual California Poppies

F036. CROCEA. Rich orange, same as the well-known single Calif. State Flower, but double. All others single.

F037. GEISHA. Brilliant scarlet outside; inside rich golden orange.

F038. VESUVIUS. Rich, glowing, striking red. Very outstanding and attractive.

F035. "COPPER BOWL". Bronzy-red, overlaid terra cotta. Form and color suggests the name I've given this variety.

F09. "PERSIAN RUG" MIXTURE. See page 27.

Price for any these five kinds: Pkt., 10c. (For other kinds see page 14.)

LONG'S Tried and True Flower Seeds

Delphinium, Gold Medal Hybrids

F013. A perennial, blooming second year from seed, known also as the Hardy Larkspur. The plants are of vigorous habit, with large flowers on spikes two feet long, when well grown. Colors run from pale lavender to deep blue. This stock improved for 1929. Pkt., 25c.

LONG'S Still Better Delphiniums

Marvelous improvements have been made with this popular flower in the past few years. Turn to Page 7.

New California Poppies

"Persian Rug" Mixture

Mr. Waller, the originator, says: "When all these colors are in bloom—red, chrome, pink, copper-red, claret, purple,—it makes you think of a beautiful Persian rug."

F09. "Persian Rug" Mixture. Pkt., 10c; ¼ oz., 50c.

Double Annual Chrysanthemum

F011. Not the large kind grown in green-houses and so much in evidence at football games, but a smaller flowered variety that blooms in the open garden from seed sown in spring. Nice for garden display and good for cutting. Most of the flowers come double. Mixed colors. Pkt., 10c; ¼ oz., 25c.

Japanese Morning Glory

F72. Colors run from white through all shades of blue and red; from palest pink to darkest reds and purples. Many flowers streaked, mottled and bordered. The leaves are also very ornamental, ivy-like and heart-shaped, green and marbled. Climbers. Plant in warm location. Pkt., 10c; oz., 30c.

LONG'S Ageratum (Floss Flower)

Dwarf, compact plants, fine for borders, edgings or pots.

F1, Blue; F2, White; F3, Choice Mixed. Price for any kind: Pkt., 5c; ¼ oz., 25c.

LONG'S Sweet Alyssum

Exceedingly popular border plant, useful in many ways in any garden. Puts the "finishing touch" to beds, walks, etc. Snow white; comes quickly from seed, and blooms continuously.

F4. LITTLE DORRIT. Similar to Little Gem but still more compact and a finer variety. Pkt., 10c; ¼ oz., 25c; ½ oz., 40c.

F4½. LILAC ALYSSUM. Same as white, but lilac color. Pkt., 10c.

LONG'S Amaranthus

Graceful plants with ornamental foliage producing a striking effect as a background or centerpiece.

F5. All Kinds, Mixed. Pkt., 5c; ½ oz., 15c.

LONG'S Antirrhinum (Snapdragon)

F7. LONG'S SPECIAL MIXTURE. Largest and finest kinds in rare variety of colors, for cut flowers or garden display. Pkt., 10c.

Separate Colors Snapdragon. White, Pink, Yellow, Red. Any color, Pkt., 10c.



LONG'S Everlasting Flower

Very ornamental in garden, easily grown from seed sown outdoors. Particularly valuable for winter decoration of vases and everlasting bouquets. Will really keep for years. May be washed with soap and water to brighten up. An old-fashioned flower that is "coming back" strong now.

Important. Cut the flowers when partly open just as shown in this picture. Don't put them in water but hang them up dry in dark. Place also some on shelf in dark closet, so blossoms and part of stem hang over edge of shelf. This gives curve and charm to the stems when placed in vase.

Golden Globe. Large, golden yellow.

Silver Globe. Chaste silvery-white.

Rose-Carmine. Shades of rose.

"Christmas Red." Very popular for Christmas decorations. Some florists and gardeners make a bunch of money selling this at Christmas time.

All Kinds Mixed. These and other colors all in one mixture.

Prices: Any color, or all mixed: Pkt., 10c; 3 for 25c.

LONG'S Scotch Marigolds

(Calendula.) Also called Pot Marigold. Grows readily from seed planted outdoors. May also be grown in pots indoors. It blooms continuously if kept picked.

Orange King. Florists' strain. Enormous orange flowers, perfectly double.

Lemon Queen. Like Orange King but clear lemon-yellow. Double.

Nankeen. Large double cream flowers slightly flushed apricot. Unique.

Prices: Any these three fine kinds: Pkt., 10c; 3 for 25c.

F13. MIXED CALENDULA. Pkt., 5c; ½ oz., 20c.

Annual Mallow (Lavatera)

F015. A showy annual, about 2 feet high, producing large cup shaped shrimp-pink flowers. Sow in May and thin to 10 inches. Pkt., 10c; ¼ oz., 25c.



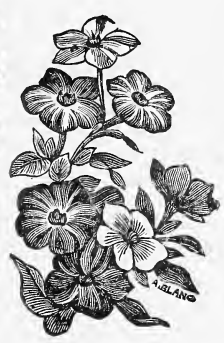
Alyssum



Snap Dragon



Canterbury Bell



Four o'Clock

LONG'S Bachelor's Button

DOUBLE BACHELOR BUTTON. Superior to the old single type. **F0½ White.** **F01 Blue, F02 Rose, F03 Mixed—all at 10c pkt.**

F8. SINGLE MIXED. Pkt., 5c; ½ oz., 20c.

LONG'S Balloon Vine

F9. Hardy annual climber, producing white flowers and seed vessels that look like small balloons. Good for screens. Seeds hard and should be soaked 24 hours. Pkt., 5c; ½ oz., 15c.

LONG'S Balsam (Lady Slipper)

Grows quickly from seed, producing large brilliant flowers. Also called "Touch-Me-Not." Great favorite with children.

F11. DOUBLE MIXED. Pkt., 5c; ½ oz., 25c.

LONG'S Calliopsis

F14. Bush plants 2 feet high covered with showy flowers. Pkt., 5c; ½ oz., 15c.

CALIFORNIA POPPY (See Eschscholtzia)

LONG'S Canary Bird Flower

F15. Rapid growing climber, 10 feet. Flowers canary yellow, and resembling a canary bird. Fine for porches, etc. Soak 24 hours. Pkt., 10c; ½ oz., 20c.

LONG'S Candytuft

F17, PURE WHITE; F18, FINE MIXED. Pkt., 5c; oz., 25c.

GIANT HYACINTH-FLOWERED. New. Extra large and fine. Pkt., 10c.

LONG'S Canterbury Bells

Hardy biennials, blooming second year from seed. Plants 3 feet high. Flowers bell shaped, and many colors. Very showy. Sow from May to August.

F19. LONG'S SPECIAL MIXTURE. Single, double, and "cup and saucer" varieties; all mixed; very fine. Pkt., 10c.

LONG'S Hardy Carnations

Biennials. These lovely fragrant carnations are the most profuse bloomers of all the so-called pinks.

F20. MARGARET. Double flowers with lovely fringed petals; delightfully fragrant; wide range of charming colors. Extra fine. Pkt., 10c; ¼ oz., 35c.

LONG'S Celosia or Coxcomb

F22. OSTRICH PLUME. Feathered varieties mixed. Pkt., 5c; ¼ oz., 25c.

F23. CRESTED COXCOMB. Dwarf plants with bright red combs. Pkt., 10c.

LONG'S Cobaea Scandens

(Cathedral Bells)

F24. Rapid growing climber, 15 to 20 feet in a few months. Has lovely lilac bell shaped flowers. Plant seeds on edge. Pinching few inches off top of plant when 6 inches high or so will make it branch out and produce denser covering. Pkt., 10c; ½ oz., 25c.

LONG'S Columbines (Aquilegia)

Early blooming hardy perennial with graceful long spurred flowers. Very showy.

F25. TRUE ROCKY MOUNTAIN COLUMBINE. The Colorado State flower, and most popular of all columbines. White center with blue petals. Pkt., 10c; ¼ oz., 35c; ½ oz., 60c; oz., \$1.10.

F26. MIXED COLUMBINES. Good variety of colors. Single and double mixed. Pkt., 10c.

LONG'S Early Giant Cosmos

Heretofore it has been necessary to list two strains of cosmos, the early with small flowers, and the late or giant flowering. This early strain is also large flowering.

F27, WHITE; F28, PINK; F29, CRIMSON; F30, FINE MIXED. Your choice of any of these colors, or mixed: Pkt., 10c; ½ oz., 25c.

LONG'S Cypress Vine

F31. Beautiful rapid growing climber with feathery foliage and star-shaped blossoms. Soak seed 24 hours in warm water. Pkt., 10c; ½ oz., 25c.

LONG'S Double Daisy

The poet's favorite flower, perennial, blooming first year from seed. Very neat for borders.

F32 PINK; F33 WHITE; F34 MIXED. Price for either color or mixed: Pkt., 10c.

LONG'S Shasta Daisy

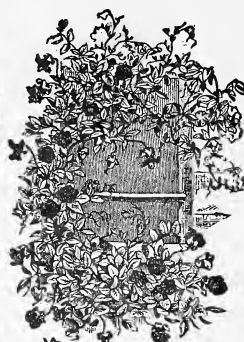
F35. SHASTA DAISY. Originated by Burbank. Large white flowers on long stiff stems, great bloomer, fine for cutting, perennial; roots may be divided after a few years and reset. Pkt., 10c.



California Poppy



Carnation



Cobaea Scandens



Celosia

LONG'S California Poppies

Blooms early and continuously from spring sown seed. Seeds itself after first year. Fine for beds or borders.

F36. GOLDEN WEST. Large golden yellow; the California State flower. Pkt., 5c; ½ oz., 25c.

F38. LONG'S BRILLIANT MIXTURE, of best kinds and colors. An unusually bright and pleasing mixture. Pkt., 5c; ½ oz., 25c.

LONG'S "Forget-Me-Not"

F32. Hardy perennial and one of the daintiest of garden favorites. Blooms first year and better next. Color blue. Pkt., 10c; ¼ oz., 25c.

LONG'S Four o'Clock

F39. Good old-fashioned easy-to-raise flower, splendid for hedge center or background. Mixed colors. Pkt., 5c; ½ oz., 20c.

LONG'S Fox Glove

F40. Tall perennial with spikes of vari-colored and spotted tube-like flowers, blooming second-year from seed. Pkt., 10c.

LONG'S Gaillardia

F41. Compact bushy plant bearing large brilliant flowers. Fine mixed. Pkt., 5c; ¼ oz., 25c.

LONG'S Geranium

F42. Perennial, blooming first year from seed if started early. Fine mixed. Pkt., 15c.

F033. GRAND ZONALE. Mixed. Pkt., 25c.

LONG'S "Satin Flower" (Godetia)

F43. Hardy annual about 18 inches tall, bearing many showy flowers of satiny texture in rich and varied colors. Does well in poor soil and somewhat shady places. Fine mixed. Pkt., 5c; ¼ oz., 15c.

LONG'S Curious Gourds

Don't overlook these for the children. Easily grown, rapid climbers, tender, sow after danger from frosts.

F44. NEST EGG. Grow your own nest eggs. Give the hen an inspiration. Plant this seed in poor soil lest you raise an ostrich egg. Pkt., 5c; ½ oz., 15c.

F45. DIPPER. Dippers are now so high that it might pay to grow your own dippers and be independent of the dipper trust. Pkt., 5c; ½ oz., 15c.

F46. MIXED GOURDS. Ornamental gourds, large and small, all shapes and colors. Many odd, fantastic varieties. Pkt., 5c; ½ oz., 25c.

LONG'S Gypsophila

Graceful plants of light fairy-like growth, covered with tiny white flowers. In great demand for combining with sweet peas and other cut flowers. Note that there are two kinds, the annual and perennial.

F47. ELEGANS (ANGEL'S BREATH) ANNUAL. Blooms first year from seed. Not so dainty as the perennial. Good plan to sow both kinds this spring, so as to have a supply this year and next. Pkt., 5c; ½ oz., 25c. **F47½.** Same as F47 above, but dainty pink. Annual. Pkt., 10c.

F48. PANICULATA (BABY'S BREATH) PERENNIAL. Blooms second year from seed and increases in size of plants each year. The tiny white flowers on branched stems are so thick as to give the plant a white lacelike effect. A "perfect dream". Pkt., 10c; ½ oz., 25c.

F049. DOUBLE GYPSOPHILA. New. This comes part semi-double and single. About one-fourth comes double. Perennial. Color white. Pkt., 25c.

LONG'S Heliotrope

F50. Perennial, blooming first year from seed. Choice mixed. Pkt., 10c.

LONG'S Double Hollyhocks

The modern double hollyhocks bear flowers as double and beautiful as the most charming rose. My double varieties in seed and plants are of the finest. Biennial.

F51. Extra fine mixture of double flowering kinds. Pkt., 10c; ¼ oz., 25c.

SEPARATE COLORS DOUBLE HOLLYHOCKS: F51 Sunset. F52 White. F53 Yellow. F54 Red. F55 Pink. F57 Maroon. F58 Black. Choice of colors. Pkt., 10c; ¼ oz., 40c.

F56. NEW LILAC DOUBLE HOLLYHOCK. Something different, and pleasing, for your garden. Pkt., 10c; ¼ oz., 40c.

F59. SINGLE HOLLYHOCKS. Mixed. Pkt., 5c. See Plant Pages for Hollyhock Roots.

LONG'S "Job's Tears"

F61. Curious ornamental grass with hard seeds used for beads. Pkt., 10c; ¼ lb., 25c.

LONG'S Japanese Hop

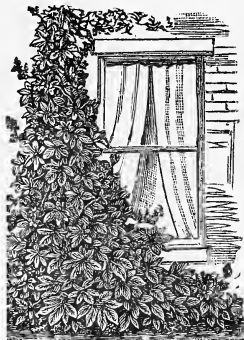
F62. A rapid growing climbing vine much used for covering unsightly objects and for shading windows and porches. Soak seed 24 hours. Pkt., 10c; ½ oz., 25c.



Mixed Gourds



Gypsophila



Japanese Hop



Marigold

LONG'S Annual Larkspur

- F63. Dwarf Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.
 F64. Tall Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

LONG'S Scarlet Flax

- F65. Slender plant with bright red saucer-shaped flowers. Very showy and easy to grow. Pkt., 5c; oz., 25c.

LONG'S Marigolds

- F67. FRENCH DWARF. Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

- F67 $\frac{1}{2}$. "LEGION OF HONOR." Rich golden yellow flowers, marked velvety brown. Fine for borders and edging. Pkt., 10c; $\frac{1}{2}$ oz., 30c.

- F68. AFRICAN TALL. Long's Special Mixture of large beauties. Pkt., 10c; $\frac{1}{2}$ oz., 30c.

LONG'S Mignonette

No garden is complete without this old-fashioned fragrant flower. Comes into bloom soon.

- F69. LONG'S SPECIAL MIXTURE. Extra fine varieties mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

LONG'S Morning Glories

- F70. TALL. Always popular for fences and screens, etc. Fine mixed. Pkt., 5c; oz., 20c.

- F71. DWARF. Good for beds or borders. Pkt., 5c; oz., 25c.

LONG'S Mexican Fire Bush

- F73. Also called Summer Cypress. The moss-like green foliage turns to deep carmine in fall. Makes inexpensive showy edge. Improved giant strain. Pkt., 10c; $\frac{1}{2}$ oz., 25c.

LONG'S Scabosia

- F74. Also known as Pincushion Plant. Flower stems are long and keep well in water. Fine mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

LONG'S Nicotiana

(Flowering Tobacco Plant)

- F75. Blossoms something like petunia but with longer tubes. Flowers very fragrant and showy. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

LONG'S Delightful Petunias

Great bloomer. Very showy and fragrant. My Giants of California are simply marvelous in size, forms and colors.

- F83. CHOICE MIXED. Splendid mixture of single varieties. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

- F89. GIANTS OF CALIFORNIA. Extra large flowers of every conceivable shade. Many blossoms ruffled. Truly wonderful. Pkt., 25c.

LONG'S Nasturtiums (Dwarf)

About one foot high and very effective. They bloom and bloom and bloom. The more you pick them the more they bloom. Fine for beds and borders, also for planting in rings around trees. Stand hot locations better than many other flowers. Easy to raise. Tramp soil after planting so it will come in contact with all portions of the ribbed seed. Soaking seed 24 hours will also hasten germination. Sow any time from first of April to July.

- F76. LONG'S SPECIAL MIXTURE. Extra fine mixture of Dwarf sorts, always giving pleasing results. Large Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Separate Colors Dwarf Nasturtiums

- F77. EMPRESS OF INDIA. Crimson. Foliage dark.

- F78. GOLDEN KING. Rich orange-yellow.

- F79. KING THEODORE. Velvety crimson.

- F80.1 PEARL. Light lemon-yellow or primrose.

- F81. VESUVIUS. Rich deep apricot.

Any separate color: Pkt., 10c; oz., 20c.

LONG'S Nasturtiums (Tall)

Fine for covering trellises, stumps, fences, etc. Very showy when planted at top of steep bank and allowed to run down the bank. Or may be allowed to ramble in any location. Flowers larger and stems longer than the dwarf kinds.

- F82. LONG'S SPECIAL MIXTURE. Fine assortment of large flowering tall or climbing nasturtiums. Large Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Separate Colors Tall Nasturtiums

- F83. KING THEODORE. Crimson-maroon.

- F84. ROSE. Bright soft rose.

- F85. SCARLET. Bright scarlet.

- F86. SUNLIGHT. Clear rich yellow.

- F87. VESUVIUS. Salmon-rose.

Any separate color: Pkt., 10c; oz., 20c.

LONG'S Phlox Drummondii

For beds and massing nothing surpasses these beautiful annuals.

- F91. GRANDIFLORA MIXED. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

LONG'S Pinks (Dianthus)

Hardy sweet scented annuals blooming all summer in variety of brilliant colors.

- F94. HEDDEWIGII. Finest of all pinks. Great variety of colors. Pkt., 10c; $\frac{1}{4}$ oz., 50c.



Morning Glory



Pink



Salpiglossis



Verbena

LONG'S Gorgeous Poppies

Wonderfully brilliant and always popular flowers. Sow where wanted, as difficult to transplant.

F94½. BRILLIANT BEAUTIES. My special mixture of finest double and other charming sorts in wide range of colors. Pkt., 5c; ½ oz., 25c.

F95. TULIP POPPY. Vivid scarlet. Pkt., 10c; ¼ oz., 35c.

F96. SHIRLEY. A beautiful single poppy, white, pink, lavender, purple, crimson, all mixed. Pkt., 5c; ¼ oz., 25c.

F96½. ICELAND. (Perennial.) Very hardy, fragrant, blooms first year from seed, good for cutting. Fine mixed. Pkt., 10c; ½ oz., 25c.

F97. ORIENTAL. (Perennial.) Tall and showy. Scarlet flowers. Looks well among shrubs. Pkt., 10c; ½ oz., 25c.

LONG'S Castor Beans

F98. Tropical looking plants growing to immense size from seed sown after danger from frost. Richer the ground the bigger they grow. Good for backgrounds and centerpieces. Children enjoy seeing them grow so quickly to size of trees 6, 8, or 10 feet tall. Pkt., 10c; oz., 25c.

LONG'S Portulaca

(Moss Rose)

F99. SINGLE MIXED. Pkt., 5c; ¼ oz., 25c.

F100. FINE DOUBLE MIXED. Pkt., 10c.

LONG'S Velvet Trumpet

Salpiglossis

F101. Very showy plant with trumpet-shaped blossoms in rare combinations of color, beautifully marbled and penciled. Pkt., 10c.

LONG'S Salvia (Scarlet Sage)

F102. Standard bedding plant where brightness of color is wanted. Flowers borne in spikes of fiery red lasting long time. Pkt., 10c.

LONG'S "Hit or Miss"

F125. Great mixture of many kinds flower seeds—as one customer said, "It's all hit and no miss." Something new nearly every day after begins to bloom. Makes a good hit with all who try it. Pkt., 5c.

LONG'S Snapdragon (Antirrhinum)

F7. LONG'S SPECIAL MIXTURE. Largest and finest kinds in rare variety of colors, for cut flowers or garden display. Pkt., 10c.

Separate Colors Snapdragon: White, Pink, Yellow, Red. Any color, Pkt., 10c.

LONG'S Double Sunflower

F105. The grandest of all sunflowers, 7 feet high, with a dozen or more blossoms on each stalk. Flowers perfectly double, resembling chrysanthemums, and of a rich golden yellow color. Perfectly gorgeous for centerpiece or background, very hardy, easily grown from seed. Pkt., 10c; oz., 25c. (For special strain of this see page 67.)

LONG'S Stocks—Ten Weeks

103½. "Cut and come again" fragrant annual. Profuse bloomer. Colors range through all the soft and distinct shades. Pkt., 10c.

LONG'S Sweet Sultan

F107. Delightfully fragrant flowers with small fringed petals. Easily grown. Something like Bachelor's Button. Choice mixed. Pkt., 5c; ¼ oz., 15c.

LONG'S Sweet William

Well-known hardy perennial producing gorgeously colored fragrant flowers. Hardy perennial, 18 inches high. Cover seed scant ¼ inch. Thin to 6 inches.

F108. SINGLE MIXED. Pkt., 5c; ¼ oz., 15c.

F109. DOUBLE MIXED. Pkt., 10c; ¼ oz., 35c.

LONG'S Verbenas

F110. MAMMOTH MIXED. Also, Red, White, Purple, or Pink. Your choice, Pkt., 10c.

LONG'S Wild Cucumber

F115. One of the quickest growing annuals, 30 feet in a season sometimes. Foliage dense, great for shade. Produces many white blossoms, followed by ornamental prickly seed pods. Will self row after first season. Soak seed in warm water 24 hours, or cut small portion of shell away from germ end (the pointed end). Pkt., 10c; oz., 25c.

Dahlia Sweet Heart's Bouquet

D36. Another famous dahlia, "Made in Colorado" by my good friend Wilmore, the oldest dahlia specialist in America.

Color, unique shading of salmon-rose, tinged with fawn; is pleasing alike in both day and artificial light.

A perfect flower of the popular peony type, much larger than this illustration; stems extra long and wiry, holding the flowers up well. One of the earliest. Blooms all season. **SPECIAL PRICE: 40c.**



You Can Originate New Dahlias from Seed

New dahlias all come from seed. Dahlia tubers come true and do not mix, but seed will produce various types and colors, probably all different from the kind that supplied the seed. There seems to be no law or rule governing this. They seem to come just as they please. That's what makes it interesting and also gives the amateur a chance to originate new dahlias of merit.

Where space is limited, it is desirable to plant tubers of a few real good kinds. But if one has more room, then it is indeed worth while to grow some from seed also. Not all from seed will be prize winners, so the usual method is to grow quite a number, then in the fall select your favorites, saving the tubers for next year.

This is the method followed by dahlia specialists. They grow hundreds and thousands from seed, then select only a few that show unusual merit. These are saved, named, and stock increased until enough on hand to offer at fancy prices. You, too, can name your own new dahlias. Some name them for members of their families, or friends. Splendid idea.

As there are no two people just alike, so there are peculiarities and individualities that make these dahlias of yours, grown from seed, different from others. This adds much interest to growing dahlias from seed.

Sow the seed out in the garden after ground warms up or start indoors and transplant. Protect plants from frosts. Dahlias from seed will nearly all blossom even from outdoor planting, and almost as soon as those from tubers.

Long's Special Mixture. A good mixture, same as I've offered for several years. Will produce many fine flowers, and some grand new ones well worth saving and naming. Pkt., 25c; 5 pkts., \$1.00.

Long's Professional Mixture. Seed saved from only the newer and finer, expensive varieties. Should produce a larger per cent of extra fine kinds, though we never can tell. Same as I myself shall use, hoping to get a few rare beauties. Pkt., \$1.00.

Note. Dahlias from seed come mostly peony flowered or decorative, the most popular types.

TO KEEP DAHLIAS HEALTHY:—Dahlias are seldom troubled with pests, but watch your plants closely. If the leaves turn brownish, or curl, or if the buds seem to blast, spray the plants well several times with some tobacco solution or kerosene emulsion. Chances are that aphids, lice or tiny red spiders are at work. See suggestions regarding use of contact spray. Dashing plants frequently with water from hose will also help some. I use Black Leaf 40, Tobacco Soap, Aft-tox or Hall's Nicotine. But don't wait too long—do the pest before they do the plants.

Immense Dahlia, "Champagne"

D28. CHAMPAGNE. (Decorative.) Remarkable for its size, and rigid stem, and unusual coloring. The color varies in autumn shades from burnished copper to a dull golden champagne and chamois. The stem is exceptionally long and strong and holds the massive flower absolutely upright high above the plant. Tubers, 60c each, prepaid.

Lost Label Dahlias

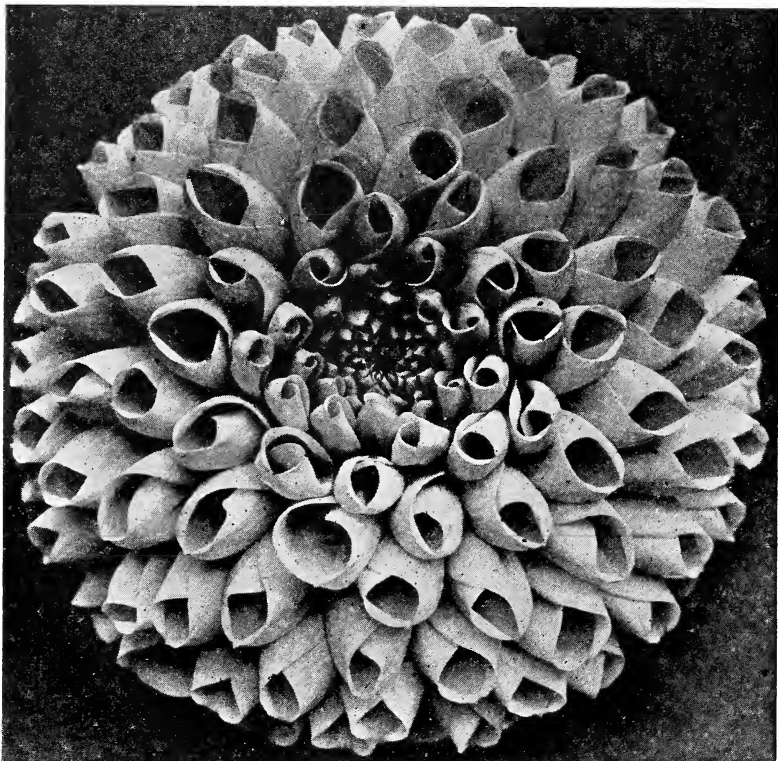
Made up from stocks that have lost their labels, also other lots of which we have too few to list, as well as from surplus of good varieties listed. Will average worth not less than 50c each. This is really a remarkable offer, for the reason I have many fine varieties too near alike, so will use near-duplicate kinds freely in these Lost Label lots. None labeled, at: 3 for \$1.00; 7 for \$2.00; 15 for \$4.00, prepaid.

UNIQUE QUILLED DAHLIA "GERO'S PINK"

D31. A seedling of the well known "quilled" dahlia, Grand Duke Alexis, resembling its parent in form but color a rich pink.

The plant is a rank and healthy grower and blooms with good stems for cutting. Each, 50c.

This illustration will also help you to visualize the following other dahlias of the quilled show type, D. M. Moore, Deelightened, Helen Hollis, and the little "Pompons".



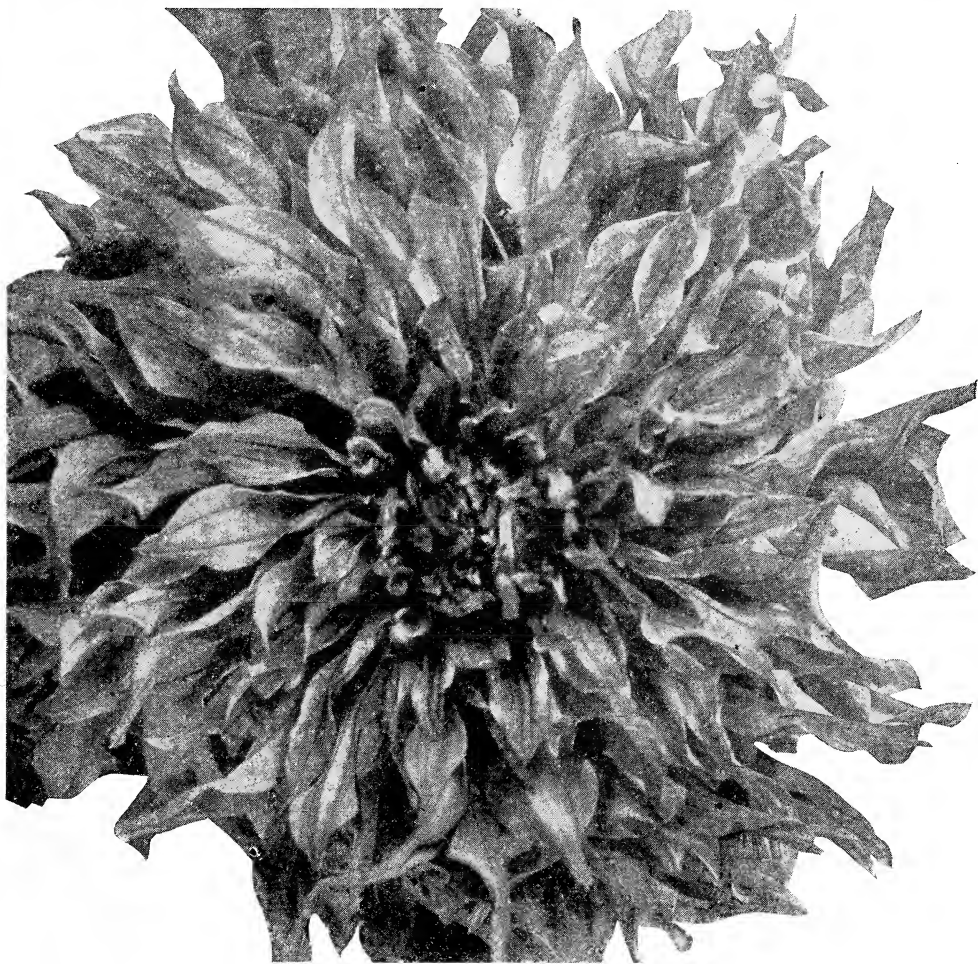
A Few Dahlia Pointers

Dahlia bulbs or tubers are similar to potatoes and should not be set out until about May 1st. Be sure to divide the clumps of last year, leaving a portion of the base of stem on each tuber, for it is at this part of the clump that the eyes are located, and each tuber must have an eye to grow. One eye is sufficient, and the size of the tuber is immaterial. Better divide and throw away part of the clump than plant it as lifted last fall. Still better, give some of the surplus tubers to some one who will appreciate them. Lay Dahlia tubers flat, rather than perpendicular, when planting. Cover four or five inches. See also, page 53.

How to Keep Dahlia Blossoms

Burning the cut end of dahlia stems or holding them in boiling water a few minutes is a common practice, to keep them from wilting. Whether you do this or not, try this also: Soon as cut, hold the blooms under cold water faucet, letting the water run on the backs of the blossoms especially. Gently shake excess water off the flowers. Then several times a day spray the backs of the dahlia blooms with cold water. This can be done with a small sprayer, or by dashing a little water with the hand. Or, take the flowers out and let more water run over them. Do a little experimenting and you will make some pleasing discoveries.

See Page 53 for Suggestions on Growing Dahlias



“William G.”—A Dahlia Different in Color and Form

D55. Classed as Decorative type, but could pass as Hybrid-Cactus. Flowers very large, with petals rather narrow, thickly set, and considerably twisted, giving the appearance of having just had a marcel at the beauty parlor. Color mostly henna or red tones, with suffusion of apricot. Some blooms show more of the apricot than others. Each, \$1.80.

“Andy Gump”—Tall, Big Red Dahlia. You’ll Say It’s Well-Named!

D121. The large bright red blossoms are held well up above the foliage on extra long, strong stems. In fact, it was the long “neck” supporting each blossom as well as the tall plant, that suggested the name to Mr. W. W. Wilmore, the originator. Fine for cutting. Each, 90c.

A Remarkable Decorative Dahlia, “Mrs. Carl Salbach”

D52. Lovely shade of mallow pink. Stems long and cane-like, holding these regal blooms erect above the tall plant. Has many medals to its credit. A fine cut flower and most beautiful and stately in the garden. Special price, each, 40c; 3 for \$1.00, prepaid.

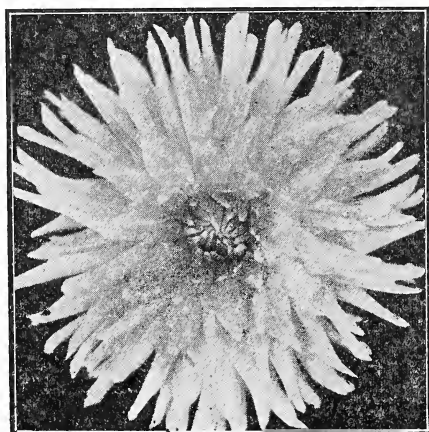
All Dahlias Priced Prepaid

LONG'S Delightful Dahlias—Many Prices Reduced, 1930

Not only have I reduced the prices of many varieties, but in addition I shall give you the following special discounts: On **Dahlia orders**, not less than \$5.00, you may deduct 5%. On orders not less than \$10.00, deduct 10%. On orders not less than \$15.00, deduct 15%. On orders of \$20.00 or more, deduct 20%.

Regarding Types or Shapes of Dahlias

There are five main divisions or classes in my list: Cactus, Hybrid-Cactus, Decorative, Peony, and Show. **Cactus** is well shown in illustration of Golden West. Some cactus dahlias have sharper pointed petals than this. If petals are not so sharp pointed, then the dahlia is classed as a **hybrid-cactus**, being between a real cactus and a decorative type. The **peony** type or form is well shown in illustration of Sweetheart's Bouquet. The **show** type is more of a full, double, ball-shaped form, as seen in illustration of Gero's Pink. The **decorative** type has wide flat petals, and more of them than the peony type; this is the most popular of all types. "Andy Gump" is an ideal **decorative** dahlia. (Prices are for single tubers. Each tuber makes large plant.)



Golden West (Size Reduced)

variety is even larger, and a beautiful shade of true light pink. Clean vigorous plants of erect habit, holding flowers high on perfect stems. Sensation wherever shown. 60c.

D9. MARGARET MASSON. (Dec.) A wonderful exhibition variety, with very large full flowers on rigid stems. Color, a pleasing shade of silvery lavender pink. \$1.00.

D10. ROMAN EAGLE. (Dec.) Brilliant burnished copper. A large flower on long stiff stems. \$1.00.

D11. AVALON. (Dec.) Pure, clear yellow. Very large and full to the center. Although so large, it is excellent for cutting. R. T. Davis, well-known Colorado dahlia grower and florist, says he considers this the best yellow decorative for cutting. 60c.

D12. MARGARET WOODROW WILSON. An exhibition dahlia of immense size and wonderful beauty. Color, an opalescent pink. Good grower, early and profuse bloomer. \$2.

D13. PRIDE OF FT. MORGAN. (Dec.) A giant red that is said to be the largest red Decorative variety to date. \$1.80.

D14. EDNA FERBER. Immense blooms with petals curled and twisted. Color, glistening coral, shading to old gold at base of petals. \$3.00.

D15. MARIPOSA. (Hybrid-Cactus.) Beautiful pink, shading darker at center, with violet suffusion. Gigantic flower of great depth and perfect form, with incurved petals. \$1.00.

D16. GOLDEN WEST. (Cactus.) Golden yellow shading to clear yellow in center. 40c.

D17. "DEE-LIGHTED". (Show.) Pure white. Probably the largest of all show dahlias. 35c.

D18. SHENANDOAH. (Dec.) Rich wine colored flowers of gigantic size on long stems. A new dahlia that makes visitors "Ah!" and "Oh!" \$1.50.

D19. ORIOLE. (Peony.) Combination of burnt orange, red and yellow, with many petals tipped white. 50c.

D20. SILVERADO. (Cactus.) Immense blooms of white shading to silvery-lavender at center. \$2.50.

D21. FAITH GARIBALDI. (Dec.) Deep rose, shading lighter on outer petals. Large. \$1.50.

D22. JERSEY'S BEAUTY. (Dec.) Fine true rose-pink. Splendid flowers borne on long strong stems. A real beauty. 75c.

D23. TRENTONIAN. (Dec.) Color a blending of old gold, amber and bronze with center zone of reddish bronze. A giant of the first order. \$1.20.

D24. DADDY BUTLER. (Hybrid-Cactus.) Rose-carmine; reverse side of petals lighter. Profuse bloomer and good keeper when cut. 60c.

D1. ATLANTIC OCEAN. (Hybrid Cactus.) A fine large flower borne on long stems. Blooms well above the foliage. Color, bright lemon. Fine in every way. \$1.00.

D2. BASHFUL GIANT. (Dec.) One of the largest dahlias introduced. The immense blooms are excellent for exhibition, the color is apricot with golden shadings. 75c.

D3. BETHEL'S BEAUTY. (Dec.) Color is deep lilac blue, the nearest approach to blue that we have seen in a dahlia. Fine. \$1.80.

D4. THE KIWANIAN. A sensational new dahlia of the Peony type. Originated by Wilmore. Long, wiry stems, from 18 to 22 inches, yet holding the flower in perfect poise. Plant is strong, with numerous side branches. Flowers large and perfect in form, 8 to 9 inches. Disbudded it will reach 10 to 12 inches. Among the best of the Peony type. Color, rich American Beauty red, shading to purple red. This dahlia was honored in name by the Kiwanians of Golden, Colo. \$1.00.

D5. DELICE. (Dec.) Rose pink. One of the best for cutting. 25c.

D6. ROLLO BOY. (Cactus.) An enormous amber and yellow cactus, one of the best of the new varieties. \$1.00.

D7. D. M. MOORE. (Show.) Deep velvety maroon. Gigantic blossoms, too heavy for stem. Not very good for cutting. But a favorite for garden show. 30c.

D8. ELLINOR VANDERVEER. (Dec.) Similar in type to I. de ver Warner, this new

D25. ELSIE OLIVER. (Hybrid Cactus.) Large creamy pink. 50c.

D26. ROOKWOOD. (Dec.) Bright cerise-rose without any touch of magenta. Large. \$1.70.

D27. CHAS. STRATTON. (Dec.) Pale gold shaded and tipped rose-red. Immense blossoms. \$1.00.

D28. CHAMPAGNE. (Dec.) Golden champagne with chamais shadings. A wonderful dahlia on account of its distinct coloring, unique form, immense size and strong stems. 60c.

D29. QUEEN OF THE GARDEN BEAUTIFUL. (Dec.) Originated in famous garden of San Quentin prison. Immense light yellow. \$1.50.

D30. RADIO. (Dec.) Blood-red, edged and tipped with yellow. One of the largest dahlias to date. \$1.00.

D31. GERO'S PINK. (Show.) Rich pink, beautifully quilled. 50c.

D33. BRIDE'S BOUQUET. (Cactus.) An ideal white for cutting. Flowers medium size; stems long and erect. A free bloomer. 50c.

D36. SWEETHEART'S BOUQUET. (See page 17.) 40c.

D37. LIBERTY BOND. (Dec.) Rich apricot. Immense flowers. 50c.

D38. LITTLE JEWEL. A miniature decorative. Popular as a cut flower, especially for decorations. Color, peach blossom pink. 50c.

D52. MRS. CARL SALBACH. (Dec.) Soft lavender-pink. Remarkable stems. Extra fine for cutting. 40c.

D53. JERSEY'S BEACON. (Dec.) A decided novelty of Chinese scarlet with a paler reverse, giving a two-toned effect. An exhibition flower of vigorous growth, excellent stem. \$1.00.

D55. WILLIAM G. (Dec.) A mammoth flower of shaggy form. Could be classed as Hybrid Cactus. Plant of sturdy well-branched habit. Color, rich henna shades. A wonderful flower. \$1.80.

D58. NINFEA (Water Lily). (Cactus.) Soft lavender-pink shading to creamy white in center. Its broad upturned petals resemble a water lily. \$1.00.

D60. MRS. FRANCES E. BULLARD. (Peony.) Extra large flower with petals so pointed and twisted as to give the appearance somewhat of a Hybrid-Cactus dahlia. A clear silver or pastel pink, shading lighter at the center. \$1.40.

D62. MARIAN BROOMALL. (Cactus.) Beautiful clear light lilac, with white center, giving a water lily effect. \$1.50.

D63. PRIDE OF CALIFORNIA. (Dec.) Similar to Andy Gump but not so large and tall. 50c.

D64. MILLIONAIRE. (Dec.) Delicate lavender with a faint pink cast overshadowing it, shading to almost white in center. One of the largest dahlias grown. 50c.

D65. ROSE FALLON. (Dec.) An immense flower of perfect form. Stems long and erect. Color, dark amber or brownish old gold. \$1.50.

D66. J. D. LONG. (Dec.) Flowers are always full and well-formed. Stems long and rigid, holding the flowers erect. Color, a blending of autumn tints of salmon-pink, amber and bronze. 50c.

D67. LEWIS, JR. (Hybrid-Cactus.) Large gorgeous velvet-red, shading deeper to the center; outer petals curved and twisted, showing a violet blue on back. Stems are long and stout. \$1.50.

D68. OPHELIA. (Dec.) A superb decorative, borne on long fine stems, holding the flower to view. Flowers medium size with full center, on long stems. Color, rich old gold with amber shading. Fine exhibition flower. \$1.00.

D81. ROSA NELL. (Dec.) Pure, bright rose, so rich, strong and rare that it stands alone. Immense flowers. Often called "The 100% Dahlia", because of its many good qualities. 50c.

D83. JUDGE MAREAN. (Dec.) Combination of glowing salmon-pink, iridescent orange, yellow and gold, all blending most beautifully. 50c.

D97. MRS. IDA DE VEE WARNER. (Dec.) Exquisite soft orchid or rosy mauve. Although very large it is splendid for cutting and exhibition purposes. Should be in every collection. 50c.

D98. EL JEEL. (Hybrid Cactus.) Combination of scarlet and gold, shaded to amber-yellow. The long narrow petals are fascinatingly curved and twisted. Very brilliant. 60c.

D101. EARL WILLIAMS. (Dec.) An exceptionally attractive variegated dahlia of large size. Supposed to be brilliant scarlet, with petals tipped white. But it does not come this way always. Often the flowers have as much white as scarlet on same plant with all red or part white and part red. But no matter how the colors are placed or blended the flowers are very unique and pleasing anyhow. 75c.

D119. WASHINGTON CITY. (Cactus.) Very large pure white cactus with star-like flowers on long, stiff stems. A splendid white. Each, 50c.

D121. ANDY GUMP. (Dec.) The very tall splendid red, dahlia held up high on long, straight, stiff stem. 90c.

D124. HELEN HOLLIS. (Show.) Beautifully quilled type, like Gero's Pink, but bright red. Large. 40c.

Cute Little "Pompon" Dahlias

Very popular. They are of the Show type (see illustration of Gero's Pink dahlia), but blossoms not over 2 inches in diameter. Splendid for cutting, lasting for days—much longer than other dahlias, when cut. Plants 3 to 4 feet high, and prolific bloomers.

D41. NERISSA. Fine rose-pink. 30c.

D42. ACHILLES. Lavender, tinted lilac. 30c.

D43. BACCUS. Clear bright red. 30c.

D44. CATHERINE. Bright yellow. 30c.

D45. CLARA HARSH. Yellow, tipped crimson. 30c.

D48. PURITY. Pure white; fine form. 30c.

Any 6 or more at 25c each.

Speaking of Hobbies

The dahlia has often been called "A Man's Flower". Men seem to vie with each other trying to see who can grow the biggest and most gorgeous or the most beautiful dahlias. The gladiolus is another flower exceedingly popular with men as well as with the whole family. That's the fine thing about growing flowers or raising a splendid back yard vegetable garden. The whole family can ride this sort of hobby, whereas they can not share Dad's recreation and pleasure in some other outdoor sports.

Some Gladiolus Questions Answered

Q. When, where, how shall I plant my Glads?

A. The best place is out in the open garden. The worst place is close to the house in poor soil from excavation, and sloping so that water runs off too rapidly.

Condensed, but sufficient suggestions are given on page 49 in this catalogue.

Q. How can I tell when my Glads are ready to take up in the fall?

A. Glads grown from bulbets may be dug any time after forming a true bulb, even though the bulb is small. No matter at what stage of growth the plants are lifted, after this, the bulbs will be sound and all right. But longer they grow the larger the bulbs become, also the more bulbets you will get, and the bulbets will be larger if the plant from bulblet has long season of growth.

But dig all bulbs before tops die down. Letting the bulbs remain in ground too long tends to bad looking and diseased bulbs. A good rule is to dig bulbs, grown from bulbs, when the tops begin to turn somewhat yellow or brown, but don't wait till tops are dead.

Another rule is to take up the large bulbs when the outer skin or husk has become smooth. Before large bulbs mature the husk is usually wrinkled. When this husk or outside coat becomes smooth and firm the bulbs will not shrink much after being dug.

Q. After digging my Glad bulbs I find some of them turning soft and spongy. Are they ruined?

A. Not likely. Unless have been frozen the bulbs may shrink somewhat but will become firm in a few weeks in storage. They were dug a bit too green or had been heavily watered right up to digging time. Good idea not to water the bulbs much the last ten days before digging them. But if ground too hard to dig well, turn on the water just enough to get the bulbs out as easily as possible.

Q. How do you dig Glad bulbs?

A. Until this fall, with spading forks. But saved a lot of time this fall by using a regular sugar beet puller, 2 mule power. Works well as is, but I think I can "remuddle" it and get still better results.

Q. Shall I cut off the tops when digging Glad bulbs?

A. Yes, cut close to the bulb, if you have many to handle. This is the usual practice, and satisfactory. But if have just a few, and valuable stock, it's not a bad idea to let the bulbs cure several weeks with tops on. This has been argued pro and con for years. Diener says leave 'em on a while.

Q. How can I prevent bulbs moulding in storage, especially when first brought in from the garden?

A. Keep air moving about them as much as possible. An electric fan is a paying investment for this use. Turn it on the racks, trays, shelves, bags, boxes of Glads. Do not put too many bulbs in box or tray. Do not stand bags of bulbs on end, but fill only half full, then lay the bags flat. Turn them often. Stir bulbs and bulbets in trays or boxes every few days. But take the trays away from other trays or boxes when you stir contents, lest some bulbs or bulbets fall into a box of another variety. Dry bulbs first in the sun and outdoor air if weather permits.

Q. Why do Glad mixtures run out? Do Glads change color?

A. Only one in many thousand Glads will fail to come true to color and type of variety

planted, if bulbs and bulbets only are planted. If seeds are planted you will seldom get a Glad same as the parent plant.

Reason mixtures run out—that is, run stronger to certain colors or varieties, and some seem to have changed into the predominating color or kind in mixture, is that certain varieties are much more robust growers than others. Some kinds just sort of "peter out" and disappear in a few years, while others increase very fast and furiously. Better plant more named varieties and keep them under labeled names. Lots more fun and kick to the Glad game this way than to grow mixtures, though a good mixture is very pleasing also. Trouble is, many mixtures are not made up of real good varieties.

Q. What are the best named Glads?

A. No one can answer this question any more than he can tell you who are the nicest and best people in all the world. Opinions and tastes differ amazingly. Some varieties I have discarded because I could see little good in them are still eagerly inquired for by a number of customers. Then again, some varieties do so much better or worse in certain sections and soils that what would be fine in one garden might be disappointing in another.

Among the moderately priced kinds I do not hesitate, however, to recommend the following. But don't expect best results from small bulbs. Plant medium or large bulbs for good specimen blooms. Gloriana, Minuet, Dr. Bennett, W. H. Phipps, Rita Beck, Chas. Dickens, Mrs. Van Konyenburg, Longfellow, Aida, Mrs. Sisson, Pfitzer's Triumph, Heavenly Blue, Mrs. Douglas, Orange Wonder, Golden Frills, Mary Frey. All can be had now for not over \$1.00 for large bulb and less for smaller sizes. Many other good ones, of course.

Q. Where can I buy good rubber stamps like you use?

A. Write the SAFFORD STAMP WORKS, 205 W. Madison St., Chicago, Ill. Ask for the cheapest plain moulding. You may get a special price on lots of 25 or more stamps ordered at one time. Get their instant drying "Justrite" stamp pads and ink also. Life too short to wait for ink to dry.

Q. What about treating Glads before planting, to keep stocks healthy?

A. The longer I grow and handle Glads the less sure I am that anyone can tell just when a bulb is really diseased. And why?

It is true that too many diseased bulbs are in circulation. Yet I'm more and more inclined to think that often bulbs are thought to be diseased, when they are really "fundamentally sound" but have been so mistreated that appearances are against them.

Some varieties,—Giant Nymph, Phipps, Far-rar, and others that keep a grower guessing as to just what proportion of his crop will be fit to sell, are very thinly clad. Some have gone modern to such an extent that they have almost no clothes at all. If handled roughly when dug or any time thereafter before bulbs are well cured, they bruise badly. Then often begin to "mummify," so that by spring little or no life is left. This is especially true of the smaller bulbs, because the hardening, started from a bruise, doesn't have to penetrate far until it eats into the vitals of the bulb. Handle with care. Avoid bruising—"Save the surface and you save all".

(Continued on Page 48.)

Gladiolus—The King of Flowers

Maybe you'll say it's the Dahlia, or some other flower that's King. All right, I'll not quarrel with you. But if the Gladiolus is not King, then it sure must be President, Prime Minister, Secretary of State, or some other notable.

Let's consider the Gladiolus. You who have grown it and become "Glad Fans" may run along and inspect the many fine varieties I'm displaying on the following pages. But if you've not already grown and fallen in love with "Glads" (that's what we call 'em for short—Glads), then please tarry a few moments while I tell some things that make this flower so popular and intensely interesting to grow.

Glads are so easy to grow that even if you don't have good "luck" with flowers, as a rule, you can hardly fail with Glads. It's worth quite a bit to start out with this feeling of success practically assured.

We grow these lovely flowers by planting bulbs, just about the same as we would plant onion sets—no more trouble to plant them than to plant the sets. The bulbs vary much in size, from as small as a large garden pea up to several inches in diameter.

The smallest bulbs are not supposed to bloom the first year, though some of them do. They are planted to grow nice large blooming size bulbs for next year. Growing and increasing Glad stocks from these small bulbs and still smaller bulblets, is another story and an interesting and profitable one. Just now we will talk about growing Glads from the blooming size bulbs—those that give us quick returns in flowers.

On another page (or, if crowded out, in a special folder I'll send when filling each Glad order) will be given detailed, helpful suggestions for planting the bulbs and caring for the growing crop, as well as taking care of the new crop of bulbs that you will harvest next fall.

And that's just one of the many remarkable and delightful points about Glads. You not only get your money's worth, and then some, the first year from the flowers, but when fall comes you are handed back not just as many bulbs as you planted, but still more, as a rule, with a lot of tiny bulblets hanging to the apron strings of the mother bulbs, for good measure.

Show me the fella who started that saying, "You can't eat your cake and keep it too"! I'll bet he never grew Glads. Just think of it! From the one investment you can grow and enjoy Glads for years. With care, you can increase the supply from year to year. Seems too good to be true, doesn't it? That's why buying Glad bulbs should not be considered an expense, but an investment. This idea could be carried further, of course, to prove that buying any sort of flower bulbs, plants and seeds, should not be considered an expense, for if growing flowers adds to your happiness and health, it isn't altogether an expense, to say the least.

Just what is there about Glads that make them so interesting and fascinating to grow? Sure, they're easy to grow, as I've said. That helps a lot. But that alone would not mean so much. Weeds are easy to grow. What counts is what you've got after you've grown 'em. That's where Glads shine.

Along in July you begin to get your first blooms. A medium size bulb will send up one spike, maybe two. A large bulb usually produces two or three, sometimes four spikes. A spike is the tall shoot that comes out of the leaves and unfurls a flag, so to speak, of blossoms.



New Lavender Glad, "Dr. Moody"

Originated by Mrs. George Kinyon. Introduced by Stephen B. Jacobs. Medium lavender, sometimes flaked darker. Has won many prizes. Good spikes with well-placed large blooms, many open. Strong, healthy grower, often blooming from bulblets. Large bulbs, ea., \$1.00. Medium, 60c. Small, 30c. Bulblets, 6 for 30c; 25 for \$1.00.

Not all the blossoms open at once. A few varieties, like Phipps and some others, will sometimes display all or nearly all the blossoms of a spike at one time. Usually the lower buds unfold, one after another, several a day, this going on up the spike until the topmost buds open. The whole performance lasts a week or ten days. With some varieties, as long as 18 or 20 days. Lower blossoms fade after a few days, as newer ones come out.

It is this gradual unfolding habit that makes the Glad such a satisfactory and profitable flower for florists. They use them by the millions annually. Literally millions of Glad bulbs are planted in greenhouses and forced to bloom during the winter, while millions more are grown by florists, as well as others who sell to florists, during the summer and fall.

The amazing thing about Glads as cut flowers is the fact that the spikes may be cut when the very first bud is partly open, or even before it unfolds at all. After that the spikes may be taken into the house where they will go right on with their schedule of blooming, as though left on the plant in the garden. Thus the garden—the cream of the garden, so to speak, can be transferred into the house, on the dining-table, in the sick-room, or to decorate a room or entire house. It is not unusual to have these cut spikes in bloom ten days or so indoors. All they ask is water, light and air.

But that's not all. Seems like the Glad has more good points than any other flower. When cut with first buds about to open, the spikes may be shipped hundreds, even thousands of miles, after which they will come forth smiling, and bloom splendidly. I'd like to tell of many long distance shipments I've made, but will yield the floor to one of my customers, Mr. G. W. Dickey, an enthusiastic Glad fan in National City, California, who has a bigger Glad story. Last summer Mr. Dickey mailed a bunch of Glads in bud to President and Mrs. Coolidge for "Lindbergh Day" in Washington, receiving a note of thanks from the White House, saying the Glads came through O. K., and were much appreciated. Now you tell one!

Although popular for years, the Glad is coming into favor more and more as people discover new ways of using it for garden display and as a cut flower. As I've mentioned, few flowers are so welcome in the sick-room, for it is a never-ending joy for the sick or convalescent to watch the buds unfold from day to day—to figure out just how long before the next flower will be full open, and to enjoy the beauty of the flowers individually and collectively. Having no odor or fragrance, the Glad can be enjoyed by many who could not endure some other flowers in a room.

Much could be said also about using more Glads for garden display. A long period of blooming can be had by planting different varieties, some blooming earlier than others. Also, by planting different size bulbs of same or different varieties. The larger bulbs bloom first, followed by blooms from the smaller bulbs. Then, too, many kinds send out additional spikes as side shoots. A few even produce good size spikes from the stump after the main spike has been cut. The Los Angeles is especially noted for this, having won the name, "The Cut-And-Come-Again Glad". Plant them in rows, colonies, clumps or masses. A nice way to use them around the house and lawn is to plant each color or kind separately in small groups. Often a bit of space around edges of shrubbery that can be utilized this way.

While Glads grown in mixtures are pleasing, yet your Glad joy motor will never hit on all six until you begin to plant named

varieties and learn to know each Glad by its own name, same as you know your best and closest friends.

There are today thousands of named Glads, no two just alike. And more being originated and introduced each year. Naturally, one inquires, "Just how long can this continue? Will not every conceivable color, combination of colors, type and form be brought forth ere long?" The answer is, "When there are so many people on earth that no further variation in appearance, habit, etc., is possible, then the limit shall have been reached in Glad origination."

However, out of these thousands, only a few hundred are of outstanding merit. Others will come and go. A few topnotchers are introduced each year, along with many kinds that are no better than the old favorites. Some not so good. It's my job, and the job of anyone who specializes in growing and selling fine Glads, to sort out the better kinds and discard the less desirable. In the following list you will find a number of the newer and better kinds that will be grown and highly prized long after many others are forgotten. All are good, but some are exceptionally good. If a few are rather too high in price this season for your Glad budget, just pass them up now but look forward to possessing them in another year or two when stocks become more plentiful and prices can then be reduced.

Now I could talk for hours—or pages—to you who have not yet grown Glads, and to others who have not experienced the joy of growing and knowing Glads by name, to enthrall you in this fascinating avocation. But I'm going to take a "short cut", in this way:

I'm going to offer you a very special COLLECTION of named varieties, each labeled, and price it so reasonably that you can begin this very year to grow and know named varieties. I can give you biggest value by making these Collections sorta elastic-like, both as to sizes of bulbs and the varieties I'll use in this Collection.

You see it's this way: I have plenty of bulbs to make up hundreds of Collections. But don't always have certain varieties or certain sizes of a variety. If you give me some "leeway" as to kinds and sizes, I'll sure send you your money's worth, and then some.

It occurs to me that a fitting name for this special lot would be **DEMONSTRATION COLLECTION**, because it will come right into your own garden and demonstrate or explain more fully what I've been trying to tell you. I'm starting you out with the less expensive kinds. Leave it to me to pick the winners from some of the more plentiful varieties. Later on, when you get the "bug" you will doubtless want some of the newer creations also. Yet there will be some rather new varieties also in these Collections—some surprises!

The bulbs in these "Demonstration Collections" will run various sizes from 3/4ths inch up, depending on what sizes I have in stock. Every bulb will be good blooming size. Good value guaranteed.

Demonstration Collection

15 bulbs, all different varieties, my selection, each kind labeled. Price for one assortment or Collection, \$2.00. Two of these Collections for \$3.60; three for \$5.00; five for \$7.00. All prepaid.

Each Collection worth \$2.50 or more. These 1930 Demonstration Collections will contain more of the better varieties than I've offered at any such prices before. If you were to select them from my list these bulbs would cost at least \$2.50 for each Collection.

LONG'S Gladiolus Bulbs—Splendid Named Varieties

The Large Bulbs will measure at least one inch in diameter. This size is designated by the "L". In some varieties, my "L" bulbs will measure 1½ inches or even more, in diameter. The general average will be all of 1¼ inches. Size will vary according to stock on hand, but real good value always assured, even if we have to send some extra count. (Often send extras anyhow, as my old customers well know.)

Medium Bulbs measure ¾ths of an inch in diameter or larger. I find these **Medium Bulbs** bloom nicely, though the large bulbs often make still larger spikes or more of them. **Medium Bulbs** are designated by letter "M". (Many medium will run inch or larger.)

Small Bulbs are designated by the letter "S". They will average about half inch in diameter, some larger, some a little smaller. Not sold as blooming sizes, yet many will bloom. This size is planted mainly for growing good blooming size bulbs for next year. It's an economical way to get started for next year, with smaller investment. But if you want fine spikes of blooms this year, buy the **Large** and **Medium** sizes.

It will help us in filling your Glad bulb orders if you will mention the size each time: Large, Medium, Small, or, just use the letters, L, M, or S.

6 Bulbs at Dozen Rate. By taking 6 or more bulbs of a kind and size you may figure at dozen rate. Often quite a saving to you.

If no dozen price named, multiply single price by 10.

For larger lots see wholesale pages.

Please do not order in smaller quantities than listed.

ADDAMS, JANE. (Decorah.) Gigantic lavender with creamy throat. (L., ea., 50c.) (M., ea., 30c.) (S., 2 for 30c.)

AIDA. (Europe.) Striking dark blue with large flowers, two small red lilac blotches. Very early. (L., ea., 80c.) (M., ea., 50c.) (S., ea., 25c.)

APRICOT GLOW. (Canada.) Beautiful warm apricot shade. (L., ea., \$1.00.)

BALBOA. (Briggs.) Clear, glowing apricot-pink, blending into a warm yellow throat. (L., ea., 25c.) (M., 2 for 25c.) (S., doz., 60c.)

BECK, RITA. (Fischer.) Enormous pink flowers, well placed on tall, strong straight spike. (L., ea., 70c.) (M., ea., 40c.) (S., ea., 25c.)

BENNETT, DR. F. E. (Diener.) The famous "House-affire" red glad. Good spike. Large blooms, and plenty open. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.) (S., doz., 30c.)

BOBBY. (Kunderd.) Deep rose with rich red throat. Very large. (M., doz., 60c.) (S., doz., 30c.)

BREAK O'DAY. (Bill.) La France pink on cream. Edges deeper pink. Good size, yet early. Robust grower. (L., 3 for 25c; doz., 80c.) (M., doz., 40c.) (S., 16 for 25c.)

BUNCE, ALLEN V. (Bill.) Vivid orange-yellow, with bright central line of claret. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.) (S., doz., 30c.)

CATALINA. (Briggs.) Rosy pink, with lemon throat. (L., ea., 25c.) (M., 2 for 25c.)

CARDINAL PRINCE. (Kunderd.) Another splendid red. Darker than Dr. Bennett. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.) (S., doz., 30c.)

CARTER, PATRICIA. (Kunderd.) Very soft and airy, light shrimp-pink, absolutely free

from marking. One of the loveliest early Prim's ever originated. (L., ea., 70c.) (M., ea., 40c.) (S., ea., 25c.)

CHRIST, FREDERICK. (Diener.) Combination of LaFrance pink and yellow. (L., ea., \$3.00.) (M., ea., \$2.00.)

COLEMAN, CATHERINE. (Coleman.) Very large coral-pink exhibition variety. (M., 2 for 25c.) (S., doz., 60c.)

COMPSON, BETTY. (Diener.) Phlox-pink, overlaid phlox-purple. (L., ea., 25c.) (M., 2 for 25c.)

COFFEE BRONZE. (Kunderd.) Large early Prim, copper bronze color. (L., 2 for 25c; doz., \$1.20.) (M., 4 for 25c.) (S., doz., 40c.) (Bits., pkt., 25c.)

CORONADO. (Briggs.) Immense heavily ruffled white with rich glossy purple throat. Blooms very large and of lasting substance, well placed on good spike. Won first prize as best spike in California glad show. (L., ea., \$5.00.) (M., ea., \$2.50.) (S., ea., \$1.00.) (Bits., 3 for \$1.00.)

CORYFEE. (Europe.) A Pfitzer masterpiece. Tall spike with 8 to 10 immense well-formed flowers open at once. Soft rose-pink similar to the color of a fresh cut Ophelia rose. (L., ea., \$2.50.) (M., ea., \$1.50.) (S., ea., \$1.00.) (Bits., 10 for \$1.00.)

CRIMSON GLOW. Velvety glowing red. (L., 4 for 25c; doz., 70c.) (M., doz., 40c.)

DES MOINES, MISS. (Decorah.) Lilac shading to listerine-purple towards edges of petals. Throat light yellow. Tall, erect, wiry spike on which the blossoms are well placed and spaced. (L., ea., \$8.00.) (M., ea., \$4.00.) (S., ea., \$2.00.) (Bits., 3 for \$1.00.)

DICKENS, CHAS. (Europe.) "The New Ford." Bright radiant purple, with velvety blotch on lower petal. Strong, tall spike, with 7 or 8 large perfect flowers open at a time. Splendid placement of blooms. A very outstanding glad in its color class. Similar to the Henry Ford glad, but color a little deeper. Spike taller, with blooms well spaced and facing one way. Chas. Dickens has also been well described as: "An improved Anna Eberius—more velvety and less flecked. Stands heat better. Bulbs much more healthy and productive of good looking salable stock." (L., ea., 30c.) (M., 2 for 30c.) (S., doz., 70c.)

DIENER'S LILAC. (Diener.) Cream, lightly overlaid lilac. (L., ea., \$5.00.) (M., ea., \$2.50.)

DIENER, RICHARD. (Diener.) Geranium-pink, with cream throat. (L., doz., 70c.) (M., doz., 40c.) (S., doz., 25c.)

DOERMANN, MRS. A. B. C. (Diener.) Venetian-pink, overlaid jasper-red. Large flowers, straight spike. (L., ea., 50c.) (M., ea., 25c.) (S., 2 for 25c.)

DOUGLAS, MRS. LEON. (Diener.) Gigantic spike and blossoms. Begonia rose, striped scarlet. (L., 3 for 25c; doz., 84c.) (M., doz., 42c.) (S., 16 for 25c.) (Bits., pkt., 25c.)

FARRAR, GERALDINE. (Diener.) Pale lavender-violet with deep violet spot on lower petals. Has light-blue cast very uncommon in glads. (L., ea., 25c.) (M., 2 for 25c.) (S., doz., 60c.)

FORD, HENRY. (Diener.) Dark velvety purple. (L., doz., 70c.) (M., doz., 35c.)

FREY, MARY. (Gelsner Bros.) Originator's description: "Beautiful lavender-pink with a ruby blotch on lower petal; resembles a Cattleya orchid in color. Flowers large, perfectly placed on long, straight, slender stem, with 6 to 9 florets of lasting quality open at a time. Blooms early; vigorous growers and very prolific." (L., ea., \$1.00.) (M., ea., 50c.) (S., ea., 25c.)

- GLORIANA.** (Betscher.) Lovely large glad of clear salmon. No markings. Good straight spike. Seldom if ever crooked. (L., ea., 25c; doz., \$2.40.) (M., 2 for 25c; doz., \$1.20.) (S., doz., 60c.)
- GOLD EAGLE.** (Austin.) Deep rich yellow, daintily frilled blooms of good substance. Often produces good spikes from bulbets and many spikes from large bulbs. Early. (L., 2 for 30c.) (M., 3 for 27c; doz., \$1.00.) (S., doz., 50c.)
- GOLDEN DREAM.** (Groff.) One of the best clear deep yellows. (L., ea., 40c.) (M., ea., 25c.) (S., 3 for 25c.)
- GOLDEN FRILLS.** (Kunderd.) Rich daffodil-yellow with red lines on lower petals. Intensely and beautifully ruffled. (L., ea., 25c; doz., \$2.00.) (M., 3 for 25c; doz., \$1.00.) (S., doz., 50c.)
- GOLDEN MEASURE.** Large, tall yellow. (L., 4 for 25c; doz., 70c.)
- GOLDEN SALMON.** (Kunderd.) Golden yellow with salmon-red blending. Ruffled. (L., 2 for 30c; doz., \$1.50.) (M., doz., 80c.)
- GOODRICH, OLIVE.** (Goodrich.) White, with tips of petals beautifully edged pink. Throat tinted yellow. Blossoms large and splendidly placed on good strong erect spike. Vigorous grower. (L., ea., 30c.) (M., 2 for 30c; doz., \$1.50.) (S., doz., 70c.)
- HANKS, NANCY.** (Salbach.) Peach-red to orange-pink. Strong erect spikes hold the blossoms all facing one way and evenly spaced. Side spikes produced freely. Stays in bloom long time. Stands heat remarkably well. (L., 3 for 25c.) (M., doz., 60c.) (S., doz., 30c.)
- HARDING, PRESIDENT.** Dark red. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.)
- HEAVENLY BLUE.** (Europe.) Soft lavender-blue. Tall, straight spike with 8 or 10 fine blossoms open at one time. (L., ea., \$1.00.) (S., ea., 40c.)
- HOWARD, HELEN.** (Austin.) Golden-buff, flushed coral. Amber throat. (L., 50c.) (M., 25c.)
- HERBSTZAUBER.** (Europe.) Glowing orange-salmon. Large round flowers well placed on strong spike. (M., 2 for 30c.) (S., doz., 60c.)
- HOMESTAKE.** (Decorah.) The general color effect is a deep rich orange. (L., ea., 50c.)
- HORNBERGER, MRS. F. C.** (Hornberger.) Splendid prize winning pure, beautiful white. (L., ea., 30c.) (M., 2 for 30c; doz., \$1.50.) (S., doz., 70c.)
- IRVING, MABEL.** (Briggs.) Large, ruffled pink. (L., ea., 25c.) (M., 2 for 25c.)
- JEWEL.** (C. Z.) Tall pink with yellow throat. (L., doz., 60c.) (M., doz., 30c.)
- JOERG'S WHITE.** (Joerg.) Extra large white. (L., ea., 40c.) (M., 2 for 35c; doz., \$1.70.) (S., 3 for 25c; doz., 90c.)
- JOY, BETTY.** (Bill.) Soft creamy white, flushed LaFrance-pink. Many open, on fine, strong, straight spike. Placement perfect. (L., ea., 25c.) (M., 2 for 25c; doz., \$1.20.) (S., doz., 70c.)
- JUBILEE.** (Kemp.) Large light-lavender of immense size. Awarded Certificate of Merit at the A. G. S. show, Rochester, N. Y. 1926. (L., ea., \$12.00.) (M., ea., \$6.00.) (S., ea., \$3.00.)
- KIRTLAND, EVELYN.** (Austin.) One of the best pinks. (L., 3 for 25c; doz., 70c.) (M., doz., 40c.)
- KONYNENBURG, MRS. VAN.** (Europe.) Similar in color to Farrar, but deeper blue. "Matchless aniline blue. Grows 5 feet tall, spikes erect, flowers well placed." Healthy, strong grower. (L., ea., 40c.) (M., ea., 25c.) (S., 3 for 30c; doz., \$1.20.)
- KUNDERD, A. E.** (Kunderd.) Immense salmon-rose, Strong grower. (M., ea., 25c.) (S., 2 for 25c; doz., \$1.20.)
- KUNDERD, MARIE.** (Kunderd.) Glorious ruffled white. Scores high in every way. Early. (L., 3 for 25c; doz., 70c.) (M., doz., 35c.) (S., 16 for 25c.)
- KUNDERD, ROBT. J.** (Kunderd.) Rich deep red. (M., doz., 40c.) (S., 15 for 25c.)
- LAVENDEE BRIDE.** A large smoky lavender. (L., ea., \$1.25.) (M., ea., 75c.)
- LeCYGNE.** (Houdyshel.) Grandiflora Prim of pure white, with creamy throat. Very chaste and lovely. (L., ea., \$2.50.)
- LOCKWOOD, MARY.** (Kinyon.) Large pink glad something like Rita Beck. (L., ea., \$2.00.) (M., ea., \$1.00.) (S., ea., 50c.)
- LONGYELLOW.** (Decorah.) A beautiful pink glad that has made a great hit with amateurs, fans and florists. Tall, slender but straight and wiry spike. Well spaced and faced. **A winner.** (L., 2 for 25c; doz., \$1.20.) (M., 4 for 25c; doz., 60c.) (S., doz., 30c.)
- LOS ANGELES.** (Houdyshel.) Extravagant with its spikes of blooms of beautiful shrimp-pink—just a little "salmony," tinted orange. (L., 3 for 25c; doz., 70c.) (M., doz., 35c.) (S., 20 for 25c.)
- MADISON, MISS.** (Boynton.) Dainty pink overlaid on white. No markings. One of the few clear light-pink glads. (L., 3 for 25c; doz., 80c.) (M., doz., 40c.) (S., 16 for 25c.)
- MARMORA.** (Errey.) A sensational glad of immense size, from Australia. Lavender gray, with petunia-colored blotch. Many large blooms open. (L., ea., \$1.00.) (M., ea., 60c.)
- MARTZ, DR. CHRIST.** (Kunderd.) Showy bright red. (L., 2 for 30c; doz., \$1.50.) (M., 3 for 25c; doz., 80c.)
- MARY JANE.** (Kunderd.) Silvery lavender-pink, with lavender throat. (L., ea., 50c.) (M., ea., 25c.) (S., 2 for 25c; doz., \$1.20.)
- MCCOY, FRANK J.** (Briggs.) New tall pink. Won blue ribbon California Glad Show. (L., ea., \$2.50.) (M., ea., \$1.00.) (S., ea., 50c.) (Bits., 10 for \$1.00.)
- MCCUTCHEON, JOHN T.** (Kunderd.) A giant red. (L., 2 for 30c; doz., \$1.50.) (M., 3 for 25c; doz., 90c.) (S., doz., 40c.)
- MERCED.** (Briggs.) Brilliant orange-saffron, shading into lighter yellow in throat. Daintily ruffled. (L., ea., 25c.) (M., 2 for 25c.) (S., doz., 60c.)
- MINUET.** (Joe Coleman.) A large lively lilac-lavender glad with creamy throat. Minuet has the size, the strong straight stem, the placement of bloom, the color, that has long been sought in this color class. (L., ea., 60c.) (M., ea., 30c.)
- MOODY, DR.** (Kinyon.) A large lavender that won Award of Merit at the 1927 Boston Glad Show. Rather early for so large a glad. Strong grower. (L., ea., \$1.00.) (M., ea., 60c.) (S., ea., 30c.)
- MOTHER MACHREE.** (Stevens.) Unusual smoky color. Tall spike with 6 or 7 large well placed blooms open. (No. 1 size, ea., \$25.) (No. 2, ea., \$20.) (No. 3, ea., \$15.) (No. 4, ea., \$10.) (No. 5, ea., \$7.50.) (No. 6, ea., \$5.) (Bits., ea., \$1; 6 for \$5.)
- NIXIE.** (Diener.) Jasper pink with spectrum-red near base. Beautifully ruffled blooms. Straight, tall spike. An unusual sheen makes these blossoms attract attention as far as can be seen in the field. (L., 2 for 25c; doz., \$1.20.) (M., 4 for 25c; doz., 70c.)
- NUTHALL, BETTY.** (Salbach.) Warm light coral with pale orange throat, feathered carmine. Very large, tall, and impressive. (L., ea., \$5.00.) (M., ea., \$3.00.) (S., ea., \$1.25.) (Bits., 6 for \$1.00.)
- OPALESCE.** (Bill.) Big, tall, husky plant with large rose-lavender blossoms to match. (L., 4 for 25c; doz., 70c.) (M., doz., 30c.)
- ORANGE WONDER.** (J. A. Kemp.) Practically solid orange color. Flowers large, wide open

and well placed on good spike. Very brilliant. Sturdy grower. (L., ea., \$1.20.) (M., ea., 60c.) (S., ea., 30c.)

ORCHID. (Sprague.) Lavender-pink upon a pale flushed frosted surface. Edges lacinated and ruffled. (L., ea., 50c.) (M., ea., 25c.) (S., 2 for 25c; doz., \$1.20.)

PAGAN. (Diener.) Deep velvety red. Almost black. (L., ea., 80c.) (M., ea., 50c.) (S., ea., 25c.) (Bts., 10 for \$1.00.)

PEARL OF CALIFORNIA. (Kingsley.) La-France-pink, blending to rosy throat. Immense blooms and many open at one time. (L., ea., 60c.) (M., ea., 30c.)

PETERS, MRS. F. C. (Fischer.) Lavender or orchid color, with darker throat. Fine glad. (L., 3 for 25c; doz., 80c.) (M., doz., 40c.) (S., 18 for 25c.)

PITZER, PAUL. (Europe.) Velvety purple. (L., ea., 60c.) (M., ea., 30c.) (S., 2 for 30c; doz., \$1.40.)

PHAENOMEN. (Europe.) Pleasing combination of soft pink and delicate yellow. (L., ea., 25c; doz., \$2.00.) (M., doz., \$1.00.) (S., doz., 60c.)

PHIPPS, W. H. (Diener.) Well known as "The Wonder Glad". Not all spikes so wonderful, but many will display 14, 16, 18, and even 20 full open, unfaded blooms, at once. Blooms large and beautiful. The color is lovely iridescent pink. Spikes almost always straight. The marvelous thing about this glad is that the first blossoms hang on, and on, without drooping until nearly all have opened. Then many blossoms will remain open for days. (L., 2 for 25c; doz., \$1.40.) (M., 3 for 25c; doz., 70c.) (S., doz., 35c.)

PRESTGARD, MRS. KR. (Decorah.) Fine pure white. (L., ea., 25c; doz., \$2.00.) (M., 2 for 25c; doz., \$1.00.)

PURPLE GLORY. (Kunderd.) Deep purplish-red. Well ruffled. (L., 3 for 25c; doz., 90c.) (M., doz., 50c.) (S., doz., 30c.)

QUEEN OF NIGHT. (Diener.) Deep maroon, almost black. (M., 2 for 25c; doz., \$1.20.) (S., doz., 60c.)

ROSE ASH. Ashes of roses. (L., 3 for 25c; doz., 90c.)

ROSE MULBERRY. (Austin.) Mrs. Austin says: "To say this is coral-pink flushed ageratum-violet only approaches the description, for words cannot describe the unusual and unique beauty of the variety." (L., ea., 35c.) (M., 2 for 35c; doz., \$1.70.) (S., 4 for 25c; doz., 70c.)

ROYAL LAVENDER. (Sleider.) Deep lavender shading, lighter towards center. (L., ea., \$1.50.)

RUFFLED GOLD. (Goodrich.) Originator's description: "Lovely golden-yellow, beautifully ruffled; of distinct form and different from any other yellow; long spike, strong, healthy grower, good producer of bulbets. Almost every bulbet will grow." (L., ea., \$2.00.) (M., ea., \$1.00.) (S., ea., 50c.)

SALMON GLOW. (Hornberger.) A first early giant Prim. Orange-salmon with yellow throat. (L., doz., \$1.25.) (M., doz., 40c.) (S., 15 for 25c.)

SCARLET WONDER. (Cowee.) Immense brilliant red. (L., 4 for 25c; doz., 70c.) (M., doz., 35c.) (S., 18 for 25c.)

SCHWEPPE, MRS. LAURA. (Kunderd.) Peach blossom pink with dark throat. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.)

SERRATA. (Bill.) Cream, suffused lilac-pink. Petals serrated or lacinated. (L., ea., 25c.) (M., 2 for 25c; doz., \$1.20.) (S., doz., 60c.)

SHOOK, DR. NELSON. (Kunderd.) Deep tyrian-rose. Large and ruffled. (M., ea., 30c.) (S., 2 for 25c; doz., \$1.20.)

SISSON, MRS. P. W. (Joe Coleman.) Clear cameo-pink of heavy substance and beautiful

form. Many large flowers open. Awarded first prize best new variety by Am. Glad Society in 1926. (L., ea., 30c.) (M., 2 for 30c; doz., \$1.50.) (S., doz., 60c.)

SONNENBERG. (Bill.) Massive spikes of creamy pink, lightly flaked with lavender. The pink shades away to soft yellow in throat. Magnificent for exhibition or cut flowers. (L., ea., \$1.00.) (M., ea., 50c.) (S., ea., 25c.)

SOVEREIGN. (Vaughan.) Don't confuse with Souvenir. Sovereign is a rich, violet-purple, strong, healthy grower. The spike is tall and flowers larger than Hulot. (M., doz., 60c.) (S., doz., 25c.)

SWARTLEY, ELIZABETH. (Swartley.) Soft salmon-pink, blending into creamy-white throat. Vigorous grower, 5 to 7 blooms open, well faced, good straight spike. Early. (L., 2 for 25c; doz., \$1.20.) (M., doz., 60c.) (S., doz., 30c.)

TRIUMPH, PITZER'S. (Europe.) One thinks of it as a red, but it's a bright salmon-orange, similar in color to Dr. Bennett. Immense blooms. (L., ea., 40c.) (M., ea., 25c.) (S., 2 for 30c.)

TROUBADOUR. (Europe.) Striking deep violet, long spike with 8 to 10 large blooms open. (L., ea., \$1.00.) (M., ea., 60c.)

VEILED BRILLIANCE. (Austin.) Bright pink blooms with creamy throat; tinted grayish-blue, having the appearance of being thinly veiled. Flowers 5 to 6 inches in diameter, with 8 to 10 open at one time. (L., ea., 35c.) (M., 2 for 35c; doz., \$1.70.) (S., doz., 80c.)

VEILCHENBLAU. (Europe.) Violet-blue flowers of large size. Larger and darker than Farrar. Holland glad growers refer to this in their catalogue as "The always-running-short gladiolus," meaning they are never able to supply the demand. (L., ea., 50c.) (M., ea., 25c.)

VICTOR. (Bill.) Do not confuse with an Australian variety by same name. This glad originated by Gladiolus Bill himself. Very large, ruffled cream-yellow with heavy ruby central lines. Tall vigorous and fine. Good exhibition variety. (M., 2 for 25c; doz., \$1.20.) (S., doz., 60c.)

VIRGINIA OR SCARLET PRINCEPS. (Kunderd.) Very bright red. Spike rather short, otherwise excellent in every way. (L., 4 for 25c; doz., 60c.) (M., doz., 30c.)

WOODS, MRS. JOHN S. (Metzer.) Similar to Mrs. Douglas. Many say can't see difference; others claim some difference. My stock of the Metzer variety traces back clearly to the originator. (L., 3 for 25c; doz., 84c.) (M., doz., 42c.) (S., 16 for 25c.)

YELLOW WONDER. (Kunderd.) Near buttercup-yellow. Tall, vigorous and early. (L., 2 for 25c.) (M., 4 for 25c.) (S., doz., 50c.)

ZANG, TYCKO. (Austin.) Very large salmon-pink with white throat. Blooms measure 5 to 6½ inches. (L., 3 for 25c; doz., 90c.) (M., doz., 50c.) (S., doz., 25c.)

Pink Glads, Not Labeled

(Not named.) Selected from whatever stocks I can spare best. May be all one kind or shade, or run from light to deep pink. Extra good value always. (L., 20 for \$1.00.) (M., 40 for \$1.00.) (S., 80 for \$1.00.)

Exhibition Mixed Glads

Bigger value than can be bought if each kind labeled. This mixture will include some of the newer kinds never before used in my best mixture. (L., 20 for \$1.00; 100 for \$4.00.) (M., 40 for \$1.00; 100 for \$2.30.) (S., 100 for \$1.20.)

Gladiolus Bulblets

Number bulblets in packet based on the 100 or 1,000 price for that variety, but somewhat fewer in proportion, for the smaller price. 250 or more bulblets at the 1,000 rate.

VARIETY	Per Packet	Per 100	Per 1,000
Addams, Jane	\$.35	\$1.20	\$10.00
Aida	.35	4.00	36.00
Balboa	.25	.60	5.00
Beck, Rita	.40	3.00	27.00
Bennett, Dr. F. E.	.25		2.00
Bobby	.25		2.40
Break O'Day	.25		.80
Bunce, Allen V.	.25		2.00
Cardinal Prince	.25		1.00
Compton, Betty	.25	1.40	12.00
Copper Bronze	.25		1.20
Coryphee	1.00	9.00	80.00
Dickens, Chas.	.30	.80	7.00
Diener, Richard	.25		1.00
Dohrmann, Mrs. A. B. C.	.30	1.00	9.00
Douglas, Mrs. Leon	.25		1.00
Farrar, Geraldine	.25	.45	4.00
Ford, Henry	.25		.80
Frey, Mary	.30	2.00	18.00
Gloriana	.25	.45	3.00
Gold Eagle	.25	.60	5.00
Golden Dream	.25	1.00	8.00
Golden Frills	.25	.35	3.00
Goodrich, Olive	.30	1.20	10.00
Hanks, Nancy	.25		1.00
Helen Howard	.30	1.00	
Heavenly Blue	.50	3.50	30.00
Joerg's White	.30	1.70	
Joy, Betty	.25	.80	7.00
Konynenburg, Mrs.	.25	1.50	12.00
Kunderd, A. E.	.25	2.00	18.00
Kunderd, Marie	.25		.80
Kunderd, R. J.	.25		.80
Lavender Bride	.40	4.00	
Longfellow	.25	.30	2.50
Los Angeles	.25		.80
Madison, Miss	.25		.80
Mary Jane	.25	2.00	
Marmora	.40	2.00	
Minnuet	.35	2.50	
Moody, Dr.	.30	4.00	36.00
Nixie	.25	.30	2.50
Opalescent	.25		1.00
Orange Wonder	.40	3.60	
Orchid	.25	1.20	10.00
Pagan	1.00	6.00	50.00
Pearl of California	.30	2.40	
Peters, Mrs. F. C.	.25		.80
Phaenomen	.25	.40	3.60
Phipps, W. H.	.25		1.50
Queen of Night	.25	.60	5.00
Rose Mulberry	.25	.90	8.00
Serrata	.25	.50	4.40
Scarlet Wonder	.25		.80
Sisson, Mrs. P. W.	.25	.40	3.60
Sovereign	.25	.30	2.50
Swartley, Elizabeth	.25	.30	2.60
Triumph, Pfitzer's	.35	2.20	
Veiled Brilliance	.25	1.00	9.00
Veilchenblau	.30	2.40	20.00
Woods, Mrs. John	.25		1.00
Yellow Wonder	.25		2.00
Zang, Tycko	.25		1.00
Exhibition Mixed Glads	.25		2.40

From New Jersey: Opening a bulb package from you is heaps more fun than a Christmas package from home.

From Minnesota: Have received bulbs and bulblets from far and wide, but those from you were superior to any of the rest.

Some Glad Bouquets

It isn't what you are promised. It isn't what you expect to get—but it is **what you get** that really counts.

I could promise you more, make some prices lower, and get by all right in doing as much as I promise. But for some reason or other I like to do better than I promise, as far as possible. I can usually do this in filling Glad orders, because I grow so many that I don't seem to miss the extras I usually include. And the **quality** counts, too.

Read what these pleased customers say. All these "bouquets" are gleaned from real signed letters I received in the past few months:

From Canada: Received Glads today in perfect condition. They were certainly well wrapped and from last summer's results I know what they produce. I thank you very much for your generosity in count and also the extras.

From Indiana: Received the Glad bulbs and bulblets in perfect condition. Certainly appreciate the extra count. How is it your bulbs are so clean and bright?

From Kansas: Had wonderful success with the bulblets which I received from you last year.

From New Jersey: My order of Glads reached me yesterday in fine condition. They are very plump and clean. Many thanks for the liberal extras.

From Missouri: Bulbs came in fine condition and they were the nicest, cleanest bulbs I've ever seen.

From Canada: I cannot tell you how grateful I am on receiving the bulbs to find such beautiful ones. Your generosity in both size and count makes your package like a surprise gift hamper. Am I proud of my Glads? Well I'll say so and I'll tell the local world about you and send you what orders I can.

From Illinois: My Glads arrived Saturday in perfect condition. They are the nicest, healthiest looking bulbs! You are very generous and so kind to include so many extras.

From Nebraska: This is the most satisfactory order for Glads I have ever received, and you can rest assured that I will send future orders to J. D. I enjoy reading your questions and answers, pertaining to Glad culture.

From Colorado: The 1,000 Glads arrived this morning. I could not possibly expect bulbs in better condition, appearance, or better packed. Commander Byrd, in his Antarctic flights, is not better protected from cold.

From Washington: Shipment received, Quality No. 1, absolutely. Grade, mighty good and then some, and Quantity—well, I just want to say I have heard and read that you give good count but my order exceeded anything I had even dreamed of. I want to thank you for all of it.

From Michigan: Many thanks for my little order, for it surely was equivalent and as liberal as the Christmas box from home.

From New York: Received Glad bulbs on the 25th but too busy to open them and give them the once over. Almost regret now I didn't because I lost 72 hours of joy.

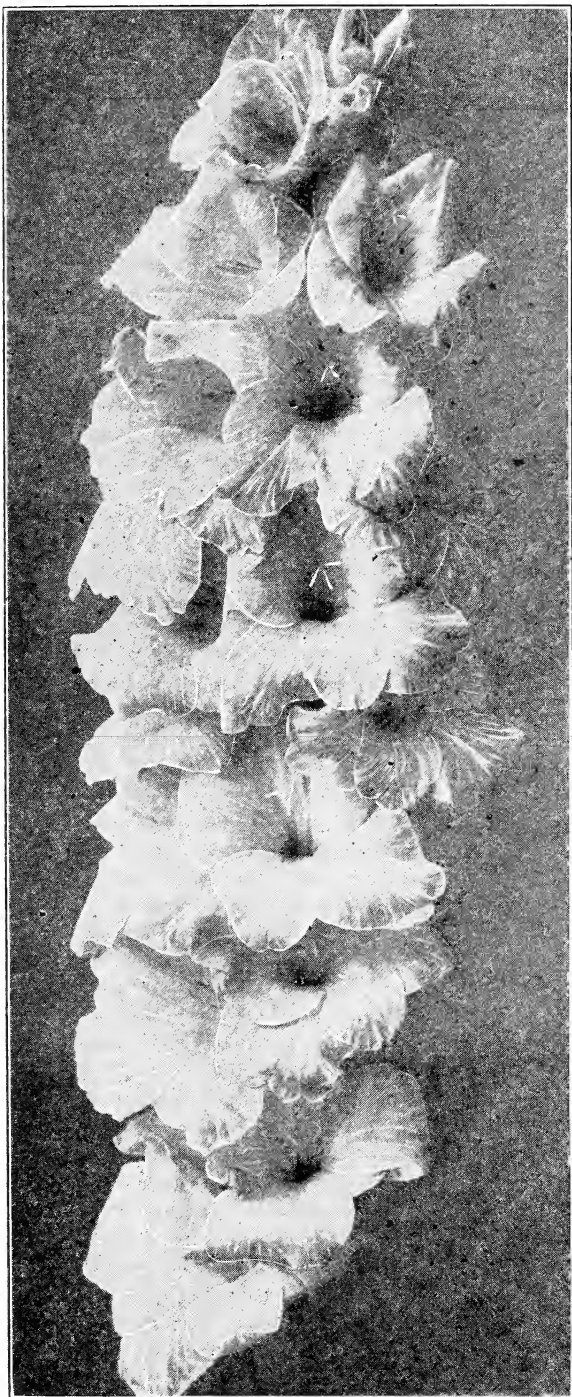
From Michigan: I received the Glad bulblets, and in all my life I was never so pleased with any glads, as with this order received.

From New York: Enclosed find order for Glad bulbs. The bulbs I got from you last year were certainly the best I have ever received.

From Massachusetts: My Glad bulbs arrived yesterday, the coldest Nov. 11th in 40 years, and they were in perfect condition. Bulbs and bulblets were generous size, looked healthy, and in fact, were fine in every respect. I want to specially thank you for your more than generous count. It looks to me as if Christmas were coming this year.

From Washington, D. C.: Glads received in good condition. The extra liberal count gives me a fine Christmas feeling.

From Ohio: Glad bulbs came in extra fine shape—nice plump clean fellows. Many thanks for the extra count.



W. H. Phipps—"The Wonder Glad"

LONG'S Long Season ASSORTMENTS

Something a little different in Glad assortments.

Each Assortment will be of one variety but the bulbs will be mixed size, from about $\frac{1}{2}$ inch up to $1\frac{1}{4}$ or so. The idea is that different size bulbs bloom at different times. So by planting the assorted sizes you get a **LONG SEASON OF BLOOM** from the one planting.

Please order just as offered, as the Assortments are put up in advance. Don't change sizes, quantities or price.

For your convenience I've priced in even \$1.00 lots. Good chance for you to get rid of those cute little dollar bills. Some don't like 'em. I do.

- ASSORTMENT "G"**
10 Bulbs Gloriana.....\$1.00
- ASSORTMENT "LF"**
19 Bulbs Longfellow.....\$1.00
- ASSORTMENT "D"**
8 Bulbs Chas. Dickens.....\$1.00
- ASSORTMENT "BOD"**
38 Bulbs Break O'Day.....\$1.00
- ASSORTMENT "B"**
22 Bulbs Dr. Bennett.....\$1.00
- ASSORTMENT "P"**
9 Bulbs Geraldine Farrar.....\$1.00
- ASSORTMENT "LA"**
33 Bulbs Los Angeles.....\$1.00
- ASSORTMENT "NH"**
20 Bulbs Nancy Hanks.....\$1.00
- ASSORTMENT "GF"**
19 Bulbs Golden Frills.....\$1.00
- ASSORTMENT "WHP"**
18 Bulbs W. H. Phipps.....\$1.00
- ASSORTMENT "GE"**
12 Bulbs Gold Eagle.....\$1.00
- ASSORTMENT "AVB"**
27 Bulbs A. V. Bunce.....\$1.00
- ASSORTMENT "S"**
11 Bulbs Serrata.....\$1.00
- ASSORTMENT "VB"**
8 Bulbs Veiled Brilliance.....\$1.00
- ASSORTMENT "MLD"**
26 Bulbs Mrs. Douglas.....\$1.00
- ASSORTMENT "MS"**
10 Bulbs Mrs. Sisson.....\$1.00
- ASSORTMENT "YW"**
17 Bulbs Yellow Wonder.....\$1.00
- ASSORTMENT "TZ"**
27 Bulbs Tycko Zang.....\$1.00
- ASSORTMENT "MVK"**
7 Bulbs Mrs. Konyneburg.....\$1.00
- ASSORTMENT "MF"**
5 Bulbs Mary Frey.....\$1.00
- ASSORTMENT "MK"**
24 Bulbs Marie Kunderd.....\$1.00
- ASSORTMENT "SW"**
27 Bulbs Scarlet Wonder.....\$1.00
- ASSORTMENT "NIX"**
19 Bulbs Nixie.....\$1.00

SPECIAL: Any 11 Assortments, alike or different, for \$10.00. No discount on less. No larger discount on more.

ALL ASSORTMENTS PREPAID

Larger Lots of Gladiolus Bulbs at Wholesale Prices

25 or more bulbs at the 100 rate. Pint or half-pint bulblets at quart rate. If sold out of size ordered, will send size smaller, adding more bulbs to make up the difference in price, unless you request us not to do so. No substitution of varieties in the following list. Measurements are diameter of bulbs. **ALL PREPAID.**

VARIETY	Size No. 1 1½ In. Up	Size No. 2 1¼ to 1½ In.	Size No. 3 1 to 1¼ In.	Size No. 4 ¾ to 1 In.	Size No. 5 ½ to ¾ In.	Size No. 6 ¼ to ½ In.	Bulblets Per Qt.
Aida.....	\$75.00	\$58.00	\$40.00	\$32.00			\$140.00
Beck, Rita.....		\$36.00	\$28.00	\$20.00	\$18.00	\$12.00	\$80.00
Bennett, Dr. F. E.....	\$6.00	\$5.00	\$4.00	\$3.00	\$2.00	\$1.40	\$7.00
Bobby.....				\$4.40	\$3.00	\$2.00	\$8.00
Break O'Day.....	\$4.00	\$3.00	\$2.40	\$1.80	\$1.40		\$4.00
Bunce, A. V.....	\$10.00	\$8.00	\$6.60	\$4.00	\$3.00	\$2.00	\$5.00
Cardinal Prince.....	\$8.00	\$5.40	\$4.00	\$2.80			\$4.00
Carter, Patricia.....	\$60.00	\$48.00	\$36.00	\$24.00	\$16.00		
Compson, Betty.....		\$14.40	\$12.00	\$8.00	\$4.80	\$3.00	\$30.00
Copper Bronze.....		\$8.00	\$6.00		\$3.60	\$2.40	\$5.00
Coryphee.....	\$160.00	\$128.00	\$100.00	\$76.00	\$60.00		
Dickens, Chas.....	\$26.00	\$20.00	\$16.00	\$12.00	\$6.00	\$3.80	\$20.00
Diener, Richard.....	\$5.00	\$4.00	\$3.20	\$2.40			
Dohrmann, Mrs.....	\$32.00	\$24.00	\$16.00				
Douglas, Mrs.....	\$5.00	\$4.00		\$2.20	\$1.40	\$1.00	\$4.00
Farrar, Geraldine.....	\$20.00	\$16.00		\$8.00	\$5.00	\$3.60	\$12.00
Frey, Mary.....	\$40.00	\$30.00	\$20.00	\$16.00	\$12.00	\$8.00	\$50.00
Ford, Henry.....	\$4.40	\$3.60	\$3.00				
Gloriana.....	\$12.00	\$10.00	\$8.00	\$6.00	\$4.00	\$2.00	\$12.00
Gold Eagle.....		\$9.00	\$6.40	\$5.00	\$4.00	\$3.00	\$10.00
Golden Frills.....	\$15.00	\$12.00	\$10.00	\$6.00	\$4.00	\$2.00	\$12.00
Goodrich, Olive.....	\$24.00	\$20.00		\$10.00			\$30.00
Hanks, Nancy.....	\$6.00	\$5.00	\$4.00	\$3.00	\$2.00		\$5.00
Harding, Pres.....		\$5.00					
Heavenly Blue.....							
Hornberger, Mrs.....	\$20.00	\$16.00		\$8.00	\$5.00	\$3.00	\$100.00
Jewel.....	\$4.00	\$3.20	\$2.60				
Joerg's White.....		\$30.00	\$20.00	\$16.00			
Joy, Betty.....	\$20.00	\$16.00	\$12.00	\$8.00	\$5.00	\$3.20	\$16.00
Kirtland, Evelyn.....	\$4.00	\$3.00	\$2.40	\$1.60			
Konynenburg, Mrs.....	\$32.00	\$24.00	\$16.00	\$12.00	\$9.00	\$6.00	\$30.00
Kunderd, A. E.....				\$16.00	\$10.00		\$50.00
Kunderd, Marie.....	\$5.00	\$4.00	\$3.00	\$2.40			\$5.00
Kunderd, R. J.....				\$2.20	\$1.60	\$1.00	\$5.00
Longfellow.....	\$10.00	\$8.00	\$6.00	\$4.00	\$2.40	\$1.60	\$9.00
Los Angeles.....	\$4.00	\$3.20	\$2.60	\$1.80	\$1.20		\$3.00
Madison, Miss.....	\$5.00	\$4.00	\$3.20	\$2.40			
Mary Jane.....	\$40.00	\$32.00	\$20.00	\$16.00	\$10.00	\$7.00	
Minnut.....		\$40.00	\$30.00	\$24.00			
Moody, Dr.....	\$80.00	\$60.00		\$32.00	\$24.00	\$16.00	\$90.00
Nixie.....	\$8.00	\$6.40	\$5.00	\$4.00			\$8.00
Opalescent.....	\$5.40	\$4.20					
Orange Wonder.....	\$100.00	\$80.00	\$60.00		\$30.00		
Orchid.....		\$32.00	\$20.00	\$16.00	\$10.00	\$6.00	\$25.00
Pagan (Diener).....				\$24.00	\$16.00	\$12.00	
Pearl of California.....		\$40.00	\$30.00	\$24.00	\$16.00		
Peters, Mrs. F. C.....			\$3.00	\$2.40			\$3.00
Pfitzer, Paul.....			\$24.00	\$16.00			
Phaenomen.....			\$10.00	\$6.00	\$4.00	\$2.80	\$10.00
Phipps.....		\$10.00	\$8.00	\$6.00	\$4.00	\$2.00	\$6.00
Queen of Night.....				\$8.00	\$5.00	\$3.00	\$16.00
Rose Mulberry.....	\$24.00	\$20.00	\$16.00	\$10.00	\$6.00	\$4.00	\$25.00
Serrata.....	\$16.00	\$12.00	\$10.00	\$6.00	\$4.00	\$2.40	\$12.00
Scarlet Wonder.....	\$4.80	\$4.00	\$3.00	\$2.40	\$1.60	\$1.00	\$2.50
Sisson, Mrs. P. W.....	\$20.00	\$16.00	\$12.00	\$8.00	\$4.80	\$3.00	\$12.00
Sovereign.....				\$3.20	\$2.40	\$1.60	\$7.00
Swartley, Eliz.....			\$4.00	\$3.40	\$2.40	\$1.60	\$6.00
Triumph, Pfitzer.....	\$40.00	\$32.00	\$24.00	\$20.00	\$15.00		
Veiled Brilliance.....	\$30.00	\$24.00	\$20.00	\$12.00	\$7.00	\$4.00	\$28.00
Veilchenblau.....		\$32.00					\$70.00
Woods, Mrs.....		\$4.00	\$3.20	\$2.40	\$1.60	\$1.00	\$4.00
Yellow Wonder.....	\$9.00	\$7.00	\$5.00	\$4.00	\$3.00	\$2.00	\$8.00
Zang, Tycko.....	\$6.00	\$4.40		\$2.40	\$1.60		\$4.00

NOTE:—In event of shortage, small lot orders take precedence over wholesale.

TO LARGE BUYERS: Growers, dealers and others who can use large quantities of a variety, or a good big order of assorted varieties, please mail me a definite list of the kinds, sizes and quantities you can use from my catalogue. Chances are I can save you money on the lot. Or, make out your order on your letterhead and I'll exceed the speed limit in over-count so long as stocks on hand will permit.

"J. D. SEZ, SEZ 'E"

When I signed off on this page just a year ago I was "enjoying poor health".

Neuritis had me by the nape of the neck, while other aches and pains were yanking me in various and sundry quarters.

Believe me, I got many letters of sympathy. Also of advice. Right here and now I want to thank all you folks who showed such kind interest in my welfare. Glad to say that neuritis has overlooked me for the past 11 months. And just why I can not tell. Don't know whether I recovered because of, or in spite of, the various treatments.

What my friend Willis Skelly said was true. He wrote me the comforting message that neuritis is like money—apt to leave a fellow suddenly.

But you don't know the half of it yet. And probably don't care to know. Just to live me up—and that's no joke, for I might be dead by now otherwise—I had two serious operations last summer, spending more than six weeks in hospitals, not to mention time out getting back my strength and pep afterwards. Thanks be, "the operations were successful," and the patient lived.

Going to fool you, though. Not going to give you an organ recital. Not even going into details regarding the opening exercises. Read somewhere that folks have been fed up on tales of operations.

I had to prepare much of the copy for my last fall catalogue while I was in bed. But got by all right. Why didn't I mention this in the fall catalogue? Well, I'll tell you. I was afraid you might think I was trying to work on your sympathies, and influence you to send me your orders more to help me than yourselves.

I'm queer that way. In all my business experience I've never solicited business from anyone on the grounds that I deserved sympathy and help. Even when I was practically bankrupt some years ago, I stuck to this policy.

Nor have I ever used membership in church, lodge, service club, etc., as a persuader. Nor personal friendship. Want my goods, service, and fair dealing to merit any business I receive. Am not much of a "jiner" anyhow. Fear that members of societies may think I'm joining mainly to work them for orders. That's one reason I never joined the Woman's Club or the Ladies' Aid.

Then, too, just suppose I'd have tried to grab off your orders by pointing with pride to my two operations. It would have started a bad precedent. I'll bet some of my "fierce competitors" would have tried to outdo me, by going through three operations. Or more. If one had a finger cut off, another would show up with a leg missing. And so on and so forth. All in all, I think I "done the right thing" by keeping still till now, when I'm as good as new again. In fact, am feeling more fit than for years. Am already beginning to read the ads about how to reduce. After 30 years trying to gain weight.

J. D. Long Reduced to 50 Cents

You guessed wrong. Wall street is not to blame. And yet stocks did play a part.

This J. D. Long I'm talking about is not myself, but my namesake—that splendid dahlia, No. 66, originated by W. W. Wilmore and named for me.

Mr. Wilmore told me just last fall that this is one of the best all-around dahlias



"That's me—J. D."

he has ever grown, and he sure grows many leading varieties. It's not the cabbage head super-size kind, but good size, with strong, wiry stems. And the color—well, I'm too modest to rant about this any more. Plant it and see for yourself. My stocks of JDL increased splendidly last summer, so the price is reduced to only 50c for good strong tuber.

Speaking of Cats Coming Back

Just as Gladiolus has been shortened to Glad, so catalogue has been pruned down to "cat" in our office vocabulary here.

Unless all signs fail, we won't have enough "cats" to go around this spring. Never had so many requests so early. Now in case you don't have any use for this 1930 spring Garden Book, you could do me a great favor by mailing it back to me. Takes two cents postage. Mail in envelope or roll not very tightly. If you haven't had 2 cents worth of advice or entertainment in giving the catalogue the once over, just mention it and I'll refund postage. Thanks a lot.

Howcum the Big Strawberries

Those three super strawberries were drawn by an optimist. I won't say you can't grow my Mastodons even larger. But think these are just a little bigger than any I have grown myself.

No doubt you have heard the story of the rooster that rolled an ostrich egg into his domain, then called the hens together and said: "Now girls, I just want you to see what others are doing." So our artist, Mr. H. J. Poertner, has shown you what he can do. It's up to you to beat his record now. I turned Mr. Poertner and J. O. Burdette, his accomplice, loose in my Mastodon patch last fall. They tell some big stories about the sensation created when they took back a lot of Mastodons to the office and printing force. And that reminds me, this catalogue cover was printed by the Bradford-Robinson Printing Co., Denver. I think they "done noble". The inside 64 pages printed next door here by The News-Herald Print Shop. Another good job.

Anyhow, it's amazing to find what big fine berries can be grown from my pure healthy Mastodon plants, when conditions are at all favorable. Try your luck. Beat Poertner's record if you can.

Poor Ned! He's Dead—No Wonder!

"There was a young person named Ned,
Who dined before going to bed
On lobster and ham
And salad and jam,
And when he awoke he was dead."

That sure taught Ned a lesson. He should have eaten more "garden sass"—lettuce, spinach, tomatoes, cabbage and other vegetables fresh from his own backyard garden. As the lady said: "They are just teeming with pantomimes."

Billboard Flowers

Among the flowers that catch the eye from afar and change the subject for the back-seat driver as the car whizzes past a garden, are Zinnias, chrysanthemum-flowered Sunflower, modern Delphiniums, gorgeous double Hollyhocks, peony-flowered Poppies, orange Calendula, and free-flowering Dahlias.

Just a few words more regarding that golden double Sunflower shown on page 65. I meant to say also that I can supply you the same variety at 10c a packet. This is No. F105, listed on page 16. It is also good, but will not come so nearly uniform in color, height and habit as the F106 at 25c a packet. Is Jake with me whether you buy one or the other.

Here are some of the dahlias that I have found qualify as "Billboard Flowers": Avalon, that immense yellow with such strong

stems. And Champagne, for same reasons. Then there is "Andy Gump" so tall and red-flowered. The Kiwanian takes no back seat for Andy as to height. For that matter, most any of the newer large-flowered dahlias create a real sensation when in full bloom.

Early Sunshine Sweet Corn

That's something you will like. Similar to Bantam, but both larger and earlier—a happy combination of advantages. See page 38.

"Beans Is Beans"

For two years now the crop of garden bean seed has been very short, resulting in somewhat higher prices in many catalogues. I was lucky to have my seed grown in a favorable locality, so have a pretty fair supply of beautiful seed for this spring. Could get higher prices, but am going to hold them down so all my customers can make several plantings for a succession of tender "stringless string beans" right from your own gardens.

For the Lawn's Sake!

Lawns may be started or old ones renewed or renovated any time from earliest spring to October.

New lawns should be thoroughly worked, leveled and allowed to settle, then leveled again. The more care before sowing the seed the better the results. Seed will wash to the low spots and make your lawn spotted. Some complain that the seed was "no good", as came up only in spots. Sow about one part clover to three parts blue grass. Use not less than pound to 300 sq. feet.

Sow part the seed one way and then some more crosswise, so as to avoid streaks. Rake well before and after sowing. Water gently so often that soil never dries out until lawn is green. Clover comes quickly. Blue Grass comes slowly but hangs on like grim death after gets a foothold. Clover draws nitrogen from the air and enriches the ground for itself and the Blue Grass.

Old lawns should be re-seeded and fertilized from time to time. Use only the purest seed. SACCO (see page 34) is one of the best fertilizers. Use 4 lbs. to 100 square feet several times a season.

Keep Your Eye On Colorado

For years we Coloradoans have been far too modest. Now laugh, if you must.

Anyhow, we've been too bashful to stand up and tell the world half enough about our grand and glorious climate, scenery, industries, mines, rich irrigated farms; our super mountains, glaciers, National parks, etc.

But now we are organized and are going to let you in on some of these secrets. Watch your magazines and large newspapers for announcements. Hunt up the Jan. 11 issue of Saturday Evening Post and turn to pages 148 and 149. Read about "Colorful Colorado". Gaze upon the picture of one of our living, active glaciers, doing its daily dozen daily, about 35 miles west of Boulder.

This photo was taken by Mr. Fine, secretary, Boulder Chamber of Commerce. Mr. Fine has just completed a most interesting booklet with more pictures of "Colorful Colorado" and interesting descriptive matter.

Now these booklets cost real money, but are free to those who really care for them. If you are planning a vacation trip next summer, better get the lowdown on what Colorado can do towards cooling you off and making you happy. Simply write to Mr. Eben G. Fine, Secy., Chamber of Commerce, Boulder, Colorado, asking for copy of the new Boulder Booklet.

Good idea to write to other Colorado towns for still more information about our wonderful State.

Look for illustrated Colorado ads in these magazines: (**Saturday Evening Post**—Jan. 11 and 25, Feb. 8 and 22, Mar. 8 and 22, April 12 and 26, May 10). (**Time**—Jan. 13, Feb. 10 and 24, Mar. 17, April 7 and 21, May 12). (**Literary Digest**—Jan. 18, Feb. 1 and 15, Mar. 15, April 19, May 17). (**Cosmopolitan**, **Forum**, **Golden Book**, **Review of Reviews**, **World's Work**, **National Geographic**—Feb., Mar., April and May.) (**Outdoor Life**—April, May and June). If you can't read you can at least look at the pictures in these ads!



Safety-First Lawn Grass Seed

It is safest and cheapest to buy the very purest and best White Clover and Blue Grass seed for your lawn, because you avoid seeding your lawn with the noxious weeds found in cheap grass seeds, and get so much higher germination that a pound of the best will cover as much as two pounds of the cheap, chaffy, low germinating seed.

Purest White Clover

Clean seed, of bright golden color and strong vitality, "rarin' to go". Sure fine. Lb.: 80c; 2 lbs., \$1.50; prepaid. Five lbs.: 2nd zone, \$3.50; 3rd zone, \$3.55; 4th zone, \$3.65; prepaid. Ten lbs.: 2nd zone, \$6.50; 3rd zone, \$6.60; 4th zone, \$6.80; prepaid.

Best Kentucky Blue Grass

Very heavy and clean. Lb.: 60c; 2 lbs., \$1.10; prepaid. Five lbs.: 2nd zone, \$2.60; 3rd zone, \$2.65; 4th zone, \$2.70; prepaid.

Ten lbs.: 2nd zone, \$4.20; 3rd zone, \$4.30; 4th zone, \$4.50; prepaid. Write for prices on larger lots and beyond 4th zone.

Safety-First Mixed Seed

About one part white clover to three parts best blue grass. Lb.: 70c; 2 lbs., \$1.20; prepaid. Five lbs.: 2nd zone, \$3.00; 3rd zone, \$3.05; 4th zone, \$3.15; prepaid. Ten lbs.: 2nd zone, \$5.30; 3rd zone, \$5.40; 4th zone, \$5.60; prepaid. Sow about pound to 300 square feet. Thicker still better.

CREEPING BENT GRASS SEED. Has fine, tough blades, hard to mow. Requires acid soil to thrive best. Turns brown at times during the season. If conditions are just right, it makes a pretty good lawn, but has been overrated. Does not choke out well-established dandelion roots and other noxious weeds. Sow pound to 300 square feet. Best European seed. \$1.25 per pound, prepaid. Ask for prices on larger lots.

Business Terms—Read Before Ordering

Safe delivery guaranteed.

All goods prepaid, unless otherwise noted.

Cash with order, or C. O. D. Please do not ask for any other terms. Your check O. K. with us if O. K. at your bank.

C. O. D. orders. Bear in mind that C. O. D. orders cost you extra for collection and M. O. fees. On orders for perishable items, also heavy packages of other goods, we require one-fourth cash. Balance may be C. O. D.

Goods priced prepaid will be sent by parcel post or express, usually parcel post. If you specify a certain way and the other is cheaper, you pay the difference.

We ship promptly, or notify you if goods are to be sent later. So if you fail to receive goods or a notice within one week, please drop us a line at once. Don't wait.

I want you to report errors. Just drop me a line stating the trouble. That's enough. Don't need to sass me.

NON-WARRANTY—Owing to many conditions that may prevent the best seeds from growing and giving satisfaction, we, The J. D. Long Seed Company, therefore, in common with other seedsmen, give no warranty, expressed or implied, as to growth, description, quality, productiveness, or any other matter of any seeds, bulbs or plants that we send out, and we will in no way be responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned, and the money will be refunded.

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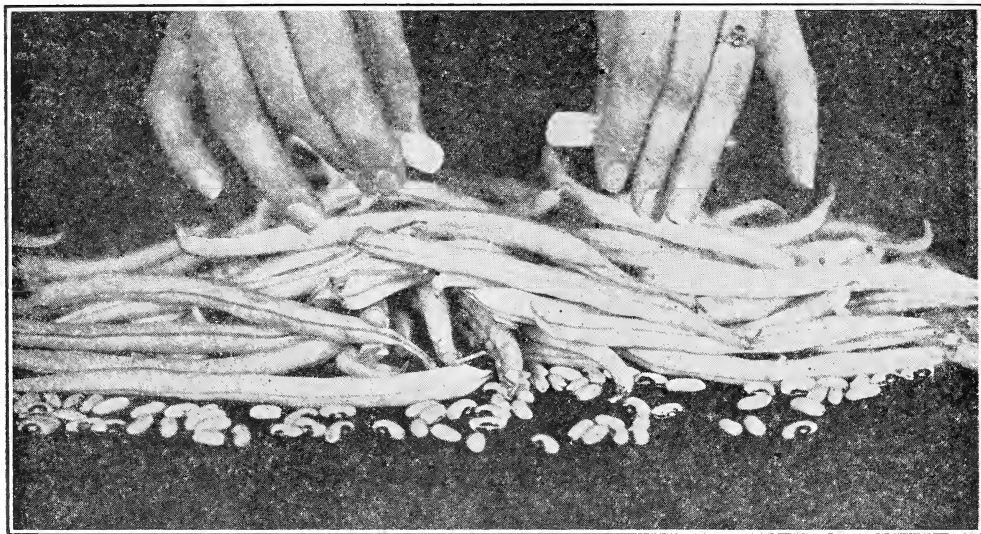
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LONG'S Beautiful, Bountiful, Brittle Beans



Two Favorites—Brittle Wax and Stringless Green Pod

V1. BRITTLE WAX. The name tells the story. If I were to suggest any other name it would be *Icicle*, for the pods break like icicles, with hardly ever a sign of string, even when full grown. The flavor is best ever. Yield good. What more could one wish? The long, round, fleshy pods are a beautiful yellow. Beans, long, white, with black eye. Good as shell beans also. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c; 3 lbs., \$1.15, prepaid.

V7. STRINGLESS GREEN POD. Might be called a green pod "Brittle Wax". Beans brown. Pods round and tender. Splendid flavor. Pkt., 10c; $\frac{1}{2}$ lb., 18c; lb., 35c; 3 lbs., \$1.00, prepaid.

V9. KENTUCKY WONDER POLE. The favorite pole bean. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 35c, prepaid.

V10. COLORADO CREAM BUTTER. (Aztec.) Immense white bean, shape of navy. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c, prepaid.

V11. HENDERSON'S LIMA. Small or "Baby Lima". Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c, prepaid.

V12. BURPEE'S BUSH LIMA. Large, juicy and sweet "butter bean". Pkt., 10c; $\frac{1}{2}$ lb., 25c; lb., 45c, prepaid.

For larger lots, see page 47.

Beat the Bean Bugs

Provide a sprayer and the right dope **before the bugs appear.** Be prepared. Arsenate of lead sticks to leaves best. White hellebore is also effective and is non-poisonous to people. Use tablespoon arsenate of lead to gallon of water, or somewhat more of the hellebore. **Spray early,** before the bugs get a start. Repeat several times. Waiting to spray until your vines are riddled is like locking the garage after your Ford is stolen. If spray with arsenate of lead, use a little vinegar in water for washing the bean pods before cooking them.



For
Lawns,
Flowers,
Vegetables,
Shrubs,
Gardens,
Potted
Plants,
Gladioli,
Etc.

SACCO contains all the chemicals and mineral elements essential to growth and development of plants. Comes in powdered form; quickly available as plant food. Keep a supply on hand. Mix with soil before planting, or as a top dressing, or both. Full directions on each package, or bag. **Prices, not prepaid:** (1-lb. can, 25c.) (5-lb. can, 50c.) (10-lb. bag, 85c.) (25-lb. bag, \$1.75.) (50-lb. bag, \$3.00.) (100-lb. bag, \$5.00.)

If by parcel post, add for each pound: 1c for 2nd zone; 2c for 3rd; 4c for 4th; 6c for 5th; 8c for 6th; 10c for 7th. Better have lots of 25 pounds or more come express or freight, as usually cheaper than parcel post. Follow directions. Don't think that if a little is good a lot is that much better. I'm using more than a ton of SACCO in my own gardens, but have a lot of territory to cover.

LONG'S "Live Beets"

V14. EARLY WONDER. A splendid extra early variety that is meeting with great favor. This quick growing, attractive variety is of the favorite globe shape. The flesh is dark red, sweet and tender. Fine for summer and fall use, canning, or storing for winter. Select seed. Large pkt., 10c; oz., 15c.

V16. CROSBY'S EARLY EGYPTIAN. Preferred now by most gardeners to the old flat type Egyptian. Uniform turnip shape; flesh deep red; quick growing. Large pkt., 10c; oz., 15c.

V17. EARLY ECLIPSE. Similar to Early Wonder and Crosby's in season and shape, but flesh a brighter red, preferred by some. Large pkt., 10c; oz., 15c.

V18. DETROIT DARK RED. Globe shape; smooth; dark red; tops small, admitting of close planting. Good all around early, medium or late variety. Splendid for canning when small. "Can you beet it?" Large pkt., 10c; oz., 15c.

V19. BLOOD TURNIP. Discontinued. Use Detroit.

(For larger lots, see page 47.)



Mangels, Sugar Beets

Culture: Sow 4 to 6 lbs. to acre, in rows 24 inches apart. In good ground you can raise 30 to 40 tons per acre. Very valuable for feeding stock, especially milch cows. A mixture of mangels and sugar beets is good combination. Add carrots for dessert!



LONG'S "in-1" Vegetables

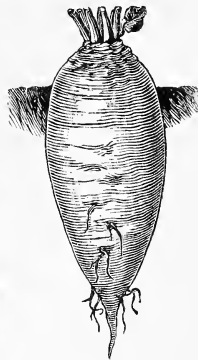
SWISS CHARD — Alias Spinach Beet, Asparagus Beet, "Chicken's Delight". Leaves may be cooked for "greens" like spinach. The stalks may be cut lengthwise and crosswise, the quartered pieces then boiled and served in butter or milk dressing like asparagus. Grow plenty and feed surplus to the chickens. They like Swiss Chard and thrive on it. Don't dig up the root or cut off all the top. Pull off the outside stalks. Others will keep forming from heart of plant. Grows in hot weather when spinach lies down on the job. Stands a lot of freezing in fall and still keeps growing. Really a wonderful vegetable. Large pkt., 10c; oz., 15c; ¼ lb., 40c.

HOW TO GROW "LIVE BEETS"

Culture: Plant any time from early spring to August. Most people make a mistake by not planting beets along in summer, as well as in spring. They come quickly, the small half-grown size being best for canning and fine for summer use also. An ounce of seed will sow 50 feet of row. Cover ¾ inch.



Golden Tankard



Sugar Beet

Prices: All Mangels, also LONG'S Special Mixture of Mangels and Sugar Beet: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c; 5 lbs., \$2.75; 10 lbs., \$4.75, prepaid. Ask for prices on larger lots.

V22. MAMMOTH LONG RED. Great yielder. One of the best of stock beets.

V23. GOLDEN TANKARD. Roots rather short. Good yielder. Easy to pull.

V25. GIANT HALF SUGAR. Richer in sugar than other Mangels, but not so rich as the Sugar beet. Heavy yielder. Grows about half out of the ground.

V26. WANZLEBEN SUGAR BEET. The standard sugar beet. Extra good seed; true strain. Prices as above.

LONG'S Special Mixture

V27. A well-balanced mixture of Mangels and Sugar Beet, for milk cows. Mixed by myself from our tested seed. Better than all Mangels or all Sugar Beet. Prices as above.

LONG'S Cabbage—Best Kinds for Home and Market



Copenhagen Market—Best Early Round Head

V31. It's growing in favor every year, not only the best Early Round Head Cabbage, but also as a splendid sort for winter, when planted a little later than the winter varieties. The dish shaped leaves fold so lightly, and the heads are so solid, that it can be grown closer together than other kinds of equal weight. True, imported stock. Pkt., 10c; oz., 25c.

"Golden Acre"—Another Solid, Early Round Head

V32. Similar to Copenhagen, but more uniform in type, a little smaller, and somewhat earlier. Heads round, from 9 to 11 inches in diameter. Select imported seed. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50, prepaid.

New Danish Cabbage for Home Gardens—"Baby Head"

V33. Originated by Hjalmar Hartmann of Copenhagen. A very early round head type, that takes little space for each plant. May be set as close as 8 inches apart. The heads are of medium size, just right for average family use, and exceedingly solid. Keeps well also, for an early variety. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$3, prepaid.

Danish Round Head (Short-Stemmed Hollander)

V35. One of the best main crop varieties. Heads very solid; good keeper. The main variety grown by large gardeners and shippers for fall and winter use. The standard best late cabbage. Long's special stock European grown seed. Pkt., 10c; oz., 25c.

V30. ENKHUIZEN GLORY. About same season as Winningstadt, but head is round instead of pointed. Pkt., 5c; oz., 20c.

V29. EARLY JERSEY WAKEFIELD. Small, pointed head. Pkt., 5c; oz., 20c.

V28. WINNINGSTADT. Heads firm, slightly pointed; early sort, but good also for winter. Pkt., 5c; oz., 20c.

V34. LATE FLAT DUTCH. Very large. Pkt., 5c; oz., 20c.

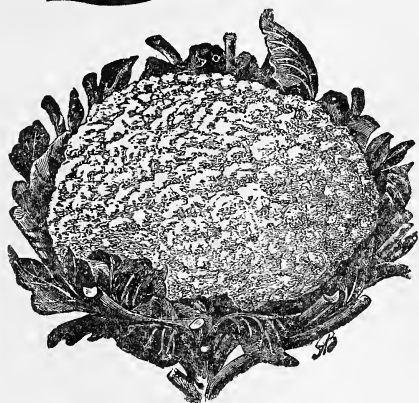
V36. MAMMOTH ROCK RED. Large red cabbage. Pkt., 5c; oz., 20c.

V37. SAVOY CABBAGE. Leaves beautifully crimped. Fine flavor. Pkt., 5c; oz., 20c.

V38 $\frac{1}{2}$. BRUSSELS SPROUTS. Miniature cabbages; grow closely on stalks. Pkt., 5c; oz., 30c.

V39 $\frac{1}{2}$. CHINESE, or CELERY CABBAGE. Early plants often run to seed. Sow in June. Tie up like cauliflower to blanch. Pkt., 10c; oz., 35c.

For Larger Lots of Cabbage, See Page 47

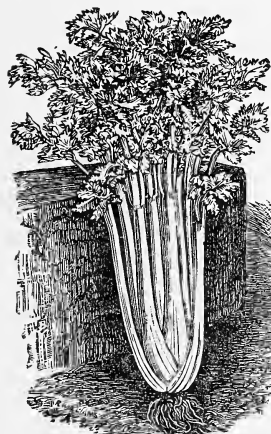
LONG'S Cauliflower

V38. EARLY SNOWBALL. (Henderson's strain.) Early and main crop variety.

V39. DRY WEATHER. Very large, and fine white heads. Resists drought well. Some gardeners prefer this to Snowball and grow it exclusively.

Price for either variety: Pkt., 10c; ¼ oz., 50c; ½ oz., 90c; oz., \$1.50; ¼ lb., \$5.50.

No Cauliflower Plants by Mail.

LONG'S Celery

Culture. Sow in protected bed; sow thin and cover lightly. Transplant in June. Ask your County Agent or Agricultural College for special information on celery growing.

V44. GOLDEN SELF-BLANCHING. One of the best early kinds for fall use. Pkt., 10c; ½ oz., 30c; oz., 45c.

V46. GIANT PASCAL. The best late celery for winter use. May be blanched in garden, but to get those brittle sweet white stalks it

should be taken up, trenched or banked up in cellar. Pkt., 10c; ½ oz., 25c; oz., 40c.

V45. WHITE PLUME. Preferred by some to Self-Blanching. Fall variety easily blanched. Pkt., 5c; ½ oz., 25c; oz., 45c.

V46½. GIANT PASCAL. Special Stock. Re-selected. Fine. Pkt., 15c; ½ oz., 35c; oz., 60c.

V47. CELERIAC. For seasoning meats and soups, also for salads. Grown exclusively for its turnip-shaped roots. Pkt., 5c; oz., 25c.

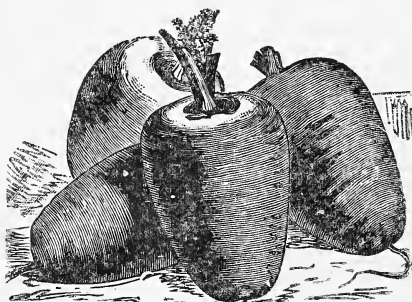
Washington Asparagus

Seed: Pkt., 10c; oz., 20c; ¼ lb., 75c.

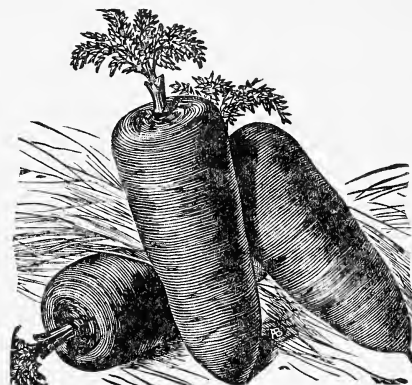
Roots: 15 for 50c; 40 for \$1.00; 100 for \$2.00. Prepaid.

LONG'S Best Four Carrots

(For larger lots, see page 47.)



V40. OXHEART. Short but thick roots, bright orange flesh; best for heavy soil; good table carrot. Large pkt., 10c; oz., 15c.



V41. DANVERS HALF LONG. Smooth, medium length, orange color roots. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V42. CHANTANEY. Large. Similar to Danvers, but not quite so long. Splendid table carrot. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V42½. NANTES. An extra sweet table carrot. Roots do not taper much, but are almost cylindrical, about 6 inches long, and very smooth. Flesh orange-red, very sweet, and almost without core. Just fine. Large Pkt., 10c; oz., 15c.

V43. GIANT WHITE BELGIAN. Heavy yielding stock carrot. Pkt., 5c; oz., 10c.

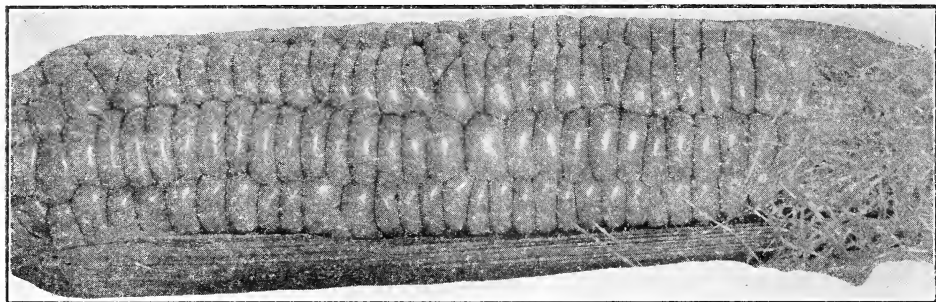
Parsley

Culture. Soak seed in tepid water a few hours before planting. Cover ½ inch.



V125. DARK MOSS CURLED. Fine for garnishing. Pkt., 10c; oz., 15c; ¼ lb., 50c.

LONG'S Acclimated SWEET CORN Seed



LONG'S Early "Peep o' Day"

V48. It's the early bird. Stands early planting. Originally this variety was quite small, but my Colorado grower has been selecting for size, and you will find a decided improvement in size of this favorite early corn.

LONG'S Improved Golden Bantam

V49. If you plant just one kind of Sweet Corn, then make this the one. My Colorado strain has been improved the same as my Peep o' Day, by selection year after year, so that my stock now runs considerably larger than the regular Golden Bantam. Instead of just 8 rows, many ears will have 10 and 12 rows. One of the many good points about Bantam is that the silks or "whiskers" come out easily and leave a nice clean ear for cooking, while its special advantage over other varieties always has been and always will be its sweetness. In this it delivers the goods.

LONG'S Giant Bantam

V50. Known also as Bantam-Evergreen, from crossing of these two splendid varieties, combining to a large degree the sweetness of Bantam and the size of Evergreen. Try this in place of Evergreen, or plant part each.

LONG'S Golden Cream

Another addition to the Golden Bantam family. Cross between Bantam and Country Gentleman, having size, deep grains and zig-zag appearance of the latter, but more the color of Golden Bantam.

V53. STOWELL'S EVERGREEN. The standard big late Sweet Corn.

V54. COUNTRY GENTLEMAN. Tall, late, very sweet, with grains set zig-zag.

Several varieties discontinued. "Plant the best. Forget the rest."

Prices: SWEET CORN in this column: Large pkt., 10c; ½ lb., 18c; lb., 30c. Prepaid. For larger lots, see page 47.

Extra Early Dent Corn—U. S. 133

We do not handle field seeds, but specialize in seeds, plants, bulbs and roots for gardens and lawns. For an extra early yellow dent field corn, said to be two weeks earlier than Minn. 13, write J. A. Gilfillan, Box 308, Platteville, Colo. Jack will tell you more about this.

New Variety Sweet Corn

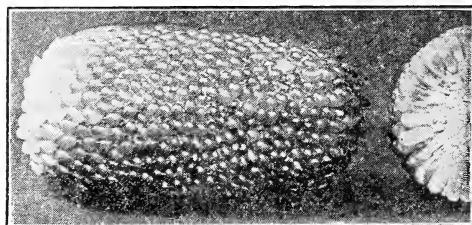
"Early Sunshine"

Ever notice that when a new golden grained sweet corn is introduced it is likely to be compared with Golden Bantam? Just shows how deservedly popular Golden Bantam is with millions of gardeners.

Now this new "Early Sunshine" is similar to Golden Bantam in color and delicious flavor. Fully as large as the original Bantam, but **earlier**. Originated way up in North Dakota by Prof. Yeager of the N. D. Agricultural College.

Finest Colorado grown selected seed: Pkt., 10c; ½ lb., 18c; lb., 35c; 5 lbs., \$1.40; 10 lbs., \$2.60, prepaid.

LONG'S Japanese Rice Pop Corn



Ears are short and "stubby," but so "heavy sot" or big around that the yield is something astonishing. Each stalk has several good ears. Some ears have 32 rows. Grains very deep and slim. Hulls so thin and transparent that the Pop Corn just melts in your mouth.

Price: Pkt., 10c; ½ lb., 15c; lb., 25c, prepaid.

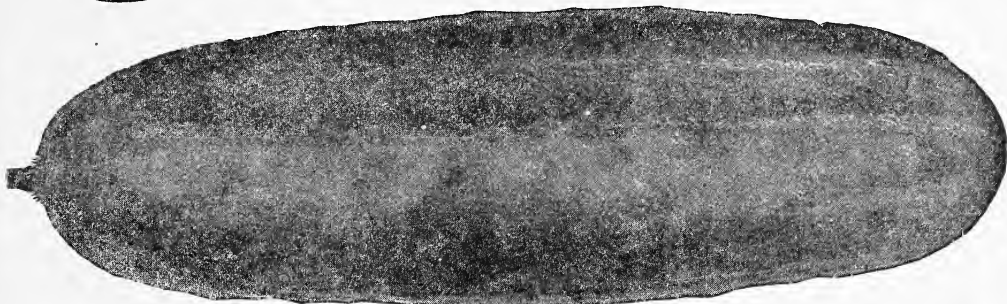
Two Other Good Kinds

V56. WHITE RICE. Small pointed grains. Kind used by the Pop Corn wagons in cities. Pkt., 5c; ½ lb., 13c; lb., 20c. Prepaid.

V57. MAMMOTH WHITE, or SPANISH. Extra large, sweet and tender. Great seller. Usually sells on cob in grocery stores. Extra early. Pkt., 5c; ½ lb., 12c; lb., 20c. Prepaid.

MUSTARD

V123½. OSTRICH PLUME. Leaves long, ruffled and curved. Cook it like spinach. Pkt., 5c; oz., 10c; ¼ lb., 30c.

LONG'S Cucumbers—Best Pickling and Slicing Kinds

V66. "LONG'S LONG LONGED-FOR LONGEST LONG GREEN." Extra long variety of beautiful appearance and splendid flavor. For pickles or slicing. For home or market. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 90c.

Prices: All CUCUMBERS (except (66) at: Small Pkt., 5c; Large Pkt., 10c; oz., 15c. For larger lots see page 47.

V61. EARLY FORTUNE. Fine for pickles when small, and good slicer.

V62. EARLY WHITE SPINE. An old favorite; still good.

V60. KLONDIKE. Very early white spine.

V63. BOSTON PICKLING. Standard for pickles. Same as Chicago Pickling.

V64. IMPROVED LONG GREEN. Always good.

V65. DAVIS PERFECT. So nearly perfect in shape it often brings extra price.

V67. WEST INDIA GHERKIN. Very small prickly sort, for pickles only. Use when quite young. Pkt., 5c; oz., 25c.

LONG'S Head Lettuce

Prices: All varieties LETTUCE (except V72): Small Pkt., 5c; Large Pkt., 10c; oz., 15c. For larger lots see page 47.

V70. IMPROVED HANSON. Good heading variety and may also be used as leaf lettuce when young.

V71. ICEBERG. Similar to Hanson. Crisp and tender. One of the best for home gardens. Fine as leaf lettuce also.

V73. BIG BOSTON. Popular market variety.

V74. MAY KING. Extra early.

V75. DENVER MARKET. Rather loose head; leaves light golden green, beautifully savoyed or crimped.

V76. EARLY PRIZE HEAD. Forms loose head. Leaves crimped; tinged brownish-red.

V79. COS. One of the surest blanching kinds, of elongated form.

Mountain Head Lettuce**LONG'S Special Stock**

V72. NEW YORK. Also called Los Angeles. Wonderful, Mountain Iceberg, and Western Iceberg. May have several more names, for all I know.

Don't pay extra for new, high sounding names. If you want to grow the best head lettuce of this type, then get the best seed of the genuine New York, no matter whether it is listed as this or given some new name.

Prepaid prices for true selected stock of this NEW YORK head lettuce seed: (Pkt., 10c.) (Oz., 25c.) ($\frac{1}{4}$ lb., 70c.) (Lb., \$2.25.) (2 lbs., \$4.40.) (3 lbs., \$6.30.) (4 lbs., \$8.20.) (5 lbs., \$10.00.) (6 lbs., \$11.95.) (7 lbs., \$13.65.) (8 lbs., \$15.20.) (9 lbs., \$16.65.) (10 lbs., \$18.00.)

Some large lettuce growers prefer old seed. Can supply limited amount. Same prices as above.

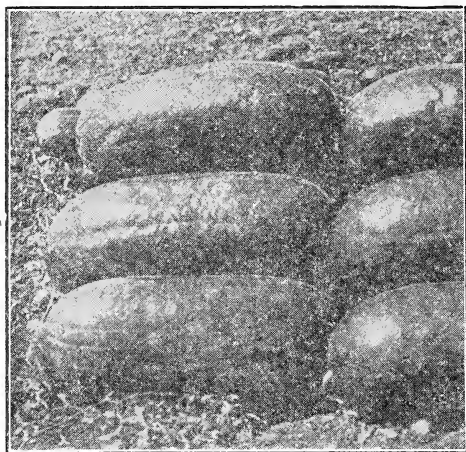
Write for Prices on Larger Lots

For years I've supplied many of the largest and most successful growers of Colorado Mountain Head Lettuce with this special high grade strain. It is grown for me by a lettuce seed grower in California who has specialized in this for 19 years, and developed an ideal type that is demanded by successful growers.

LONG'S Leaf Lettuce

V77. BLACK SEEDED SIMPSON. Grows quickly, making fluffy loose bunch of tender creamy leaves of delicate flavor. Fine.

V78. GRAND RAPIDS. Makes large compact bunches of light green leaves with fringed edges. The kind to grow in hothouses and hotbeds or coldframes. Splendid for open garden also.

LONG'S Water Melons

V92. KLECKLEY'S SWEET. The skin is dark green, flesh bright scarlet, ripening close to the skin. Seeds lie close to rind, leaving a large solid heart which does not crack open when ripe. The scarlet flesh is sweet and sugary and of such texture that it leaves no strings of pulp whatever in eating. Large Pkt., 10c; oz., 15c.

V93. TOM WATSON. Similar to Kleckley's Sweet, but still larger, and firmer, standing shipping and handling the best of any first-class melon. The rind is thin but tough; flesh bright red, delicious, sweet and satisfying. Large Pkt., 10c; oz., 15c.

V94. ICE CREAM. Fine, very sweet, early melon for home, or home market. Will not stand rough handling or shipping. Large Pkt., 10c; oz., 15c.

V95. IRISH GRAY. Large long melons with gray skin. Flesh firm, crisp and sweet. Shell tough, standing rough handling in shipping. Large Pkt., 10c; oz., 15c.

LONG'S Musk Melons

V80. ROCKY FORD. The original, well-known, green meated strain. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V83. POLLOCK No. 10-25, SALMON TINT. The best Rocky Ford cantaloupe. Heavily netted; cut with golden center, shading to emerald green near the rind. Large Pkt., 10c; oz., 15c.

V85. EMERALD GEM. Small, early salmon flesh melon, fine grained and sweet. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V86. BURRELL'S GEM. Larger, longer and firmer than Emerald Gem. Rather late. Small Pkt., 5c; Large Pkt., 10c; oz., 15c.

V88. HONEY DEW. Large late melon that ripens after being picked and stored, if fails to mature in field. Salmon flesh. Large Pkt., 10c; oz., 15c.

V89. HONEY DEW. Same as V88, but flesh green. Large Pkt., 10c; oz., 15c.

V81. BAY VIEW. Large, long, early musk melon; flesh green. Pkt., 5c; oz., 15c.

V90. GARDEN LEMON. Very small. For pickles and preserves. Pkt., 5c; oz., 20c.

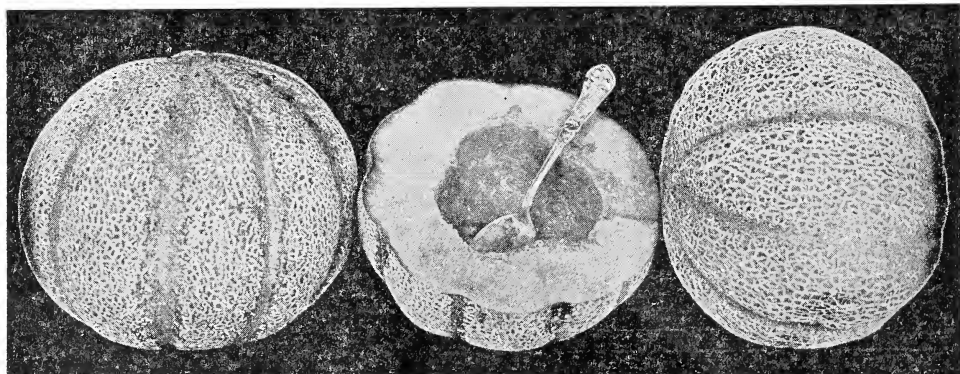
V84. COLORADO CITRON. Used for preserves. Pkt., 5c; oz., 15c; ¼ lb., 35c.

V91½. ANDRUS MUSK MELON. Cross between Greeley Wonder and Bay View. Salmon flesh. Pkt., 10c; oz., 20c; ¼ lb., 60c.

(For larger lots, see page 47.)

Banana Muskmelon

V88½. BANANA MUSKMELON. The fruits are banana shape and have a banana-like flavor. Thick salmon flesh. Pkt., 10c; oz., 15c.

**LONG'S Greeley Wonder Melon—"Sweet as Honey"—Sure "Yum-Yum"**

V91. This Colorado melon is a real wonder. Although earlier than the well-known Rocky Ford, it is ever so much larger, has finer flavor, weighs from 5 to 8 pounds, with record of 12 to 15 pounds at times. Has the right of way on the Northern Colorado melon market. Does well wherever melons are grown. Salmon flesh. Pkt., 10c; oz., 25c; ¼ lb., 70c; lb., \$1.80; 2 lbs., \$3.20; 3 lbs., \$4.50; 5 lbs., \$7.00, prepaid.

Here's That Early Golden Yellow Colorado Onion

Mountain Danvers Franklin's Improved Strain

V103. Over in western Colorado, way up at an altitude of over 6,000 feet, lived a gardener with an idea. This man believed he could develop an Onion that would yield well and mature perfectly in his section, where onion growing had been given up on account of the short season. He made good. By selecting and re-selecting he finally developed "Mountain Danvers".

For years Mt. Danvers onion made a great record as a flat to medium globe, but not uniform in color or type. Then my friend, A. L. Franklin, took it in hand and by years of selection brought it up to an ideal globe of unvarying golden yellow color. The bulbs are as sound as baseballs and almost as perfect in shape—about the shape of an apple. Necks thin; few or no scallions.

Improved Mt. Danvers is extra early, often being ready for market before main crop varieties come on, when it brings much higher prices. It is also one of the best main crop kinds, keeping and shipping especially well.

Improved Mt. Danvers insures a crop in many localities where season is short and ordinary kinds would not make good. Yet it is also meeting with much favor in lower altitudes. In some localities it has been grown to weigh a pound, record yields of 600 sacks to the acre being made under ideal conditions over on the Western Slope where this onion originated.

We have a customer up in Wyoming who plants 50 pounds or so of this seed every year, growing carloads of finest golden yellow globe onions for market.

Price for true Improved Mt. Danvers seed:
Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.40.

Mountain Red Globe

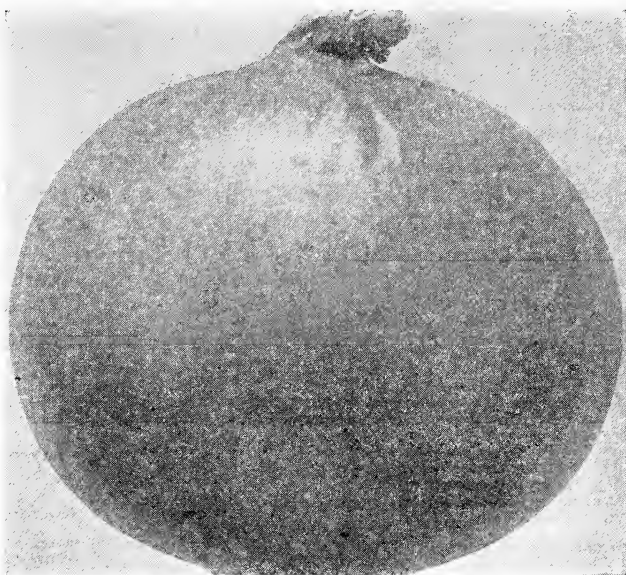
Also developed by A. L. Franklin by years of selection and re-selection. An ideal globe onion, about same type as Mountain Danvers. An improvement on the well-known Southport Red Globe in shape, thinner necks, uniformity of crop and earliness in maturity.

Color, deep rich red. No matter where this onion has been grown, reports from large growers are very gratifying. Early maturity combined with good yield makes it a leader.

Price for genuine Franklin grown seed:
Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.80, pre-paid.

ONON'S Southport Yellow Globe

V105. A standard commercial or main crop variety. Oz., 20c; $\frac{1}{4}$ lb., 60c.



For larger lots, see page 47.

Yellow Globe Danvers

V106. Well described by its name, Yellow Globe. Oz., 20c; $\frac{1}{4}$ lb., 60c.

ONON'S Red Wethersfield

V99. An old red variety still popular in some sections. Oz., 15c; $\frac{1}{4}$ lb., 45c.

ONON'S Brown Australian

V100. Very solid onion of light brown color; extra early; keeps well. Oz., 15c; $\frac{1}{4}$ lb., 35c.

ONON'S Select Prize-Taker

V96. The big yellow variety, acclimated from the popular Spanish Onion. Flesh white, and milder than many other varieties. Oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.

ONON'S White Silverskin

V102. (Also called White Portugal and White Danvers.) Produces good medium size bulbs. Is early, mild and long keeper. Oz., 25c; $\frac{1}{4}$ lb., 70c.

ONON'S Ideal White Globe

V97. Pure white, long keeping onion that matures fairly early. Oz., 25c; $\frac{1}{4}$ lb., 70c.

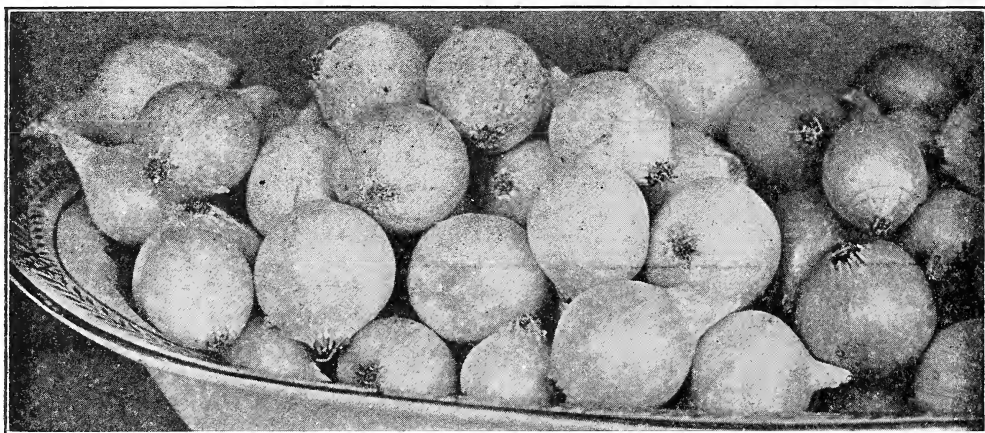
ONON'S Southport Red Globe

V104. Leading money maker for big onion growers in many sections. (Franklin's Mountain Red Globe still better.) Oz., 15c; $\frac{1}{4}$ lb., 50c.

ONON'S Early Barletta

V101. An early white variety used for pickling. Plant very thick. Oz., 20c; $\frac{1}{4}$ lb., 60c.

Except where noted, all ONION SEED at: Small Pkt., 5c; Large Pkt., 10c.

LONG'S Colorado-Grown "Hand-Polished" Onion Sets

That's no joke. These sets are actually hand-polished as they are rubbed by hand to remove all dirt, roots, tops and any other trash.

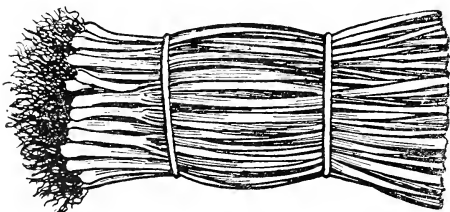
For a succession of fresh Green Table Onions, plant sets at different times, from early March until July.

Prices for Regular Sets

	2nd Zone	3rd Zone	4th Zone	5th Zone
YELLOW.				
Quart.	\$.25	\$.26	\$.28	\$.30
4 Quarts. . . . .	.85	.89	.97	1.05
8 Quarts.	1.50	1.58	1.74	1.90
16 Quarts.	2.70	2.86	3.18	3.50

WHITE.

	2nd Zone	3rd Zone	4th Zone	5th Zone
Quart. . . . .	.29	.30	.32	.34
4 Quarts.	1.00	1.04	1.12	1.20
8 Quarts.	1.75	1.83	1.99	2.15
16 Quarts.	3.30	3.46	3.78	4.10

Bermuda Onion Plants

For growing green table onions, also early dry onions for fall use. Not recommended for main crop, as do not store well or keep long, like varieties usually grown from seed.

Grown in Texas, where all these plants come from. Tied in bundles of approximately 100 plants to bundle. May be more, or less, but figured 100 to bundle. 200 (smallest order packed), 50c; 500 for \$1.00; 1,000 for \$1.80; 6,000 for \$8.00, prepaid within 4th zone.

LONG'S Hazel Size Sets

Hazels are just like other bottom sets except that they run smaller in size. The smaller size not only gives you about twice as many sets to the quart as you get when buying ordinary size sets, but also gives you a better set, for this reason: A good many sets of the size usually sold, will send up a seed stalk, which causes a hard, woody center.

But with Hazel Size Sets you rarely if ever have any trouble with seed stalks. They make the finest green onions and the best of matured bulbs, and the crop is ready for market before onions from seed come in.

Prices for Hazel Sets

(About 300 to the Quart.)

	2nd Zone	3rd Zone	4th Zone	5th Zone
YELLOW.				
Quart.	\$.37	\$.36	\$.38	\$.40
2 Quarts. . . . .	.66	.68	.72	.76
4 Quarts.	1.25	1.29	1.37	1.45

WHITE HAZELS.

	2nd Zone	3rd Zone	4th Zone	5th Zone
Quart. . . . .	.40	.41	.43	.45
2 Quarts. . . . .	.75	.77	.81	.85
4 Quarts.	1.40	1.44	1.52	1.60

LONG'S "Tiny" Onion Sets

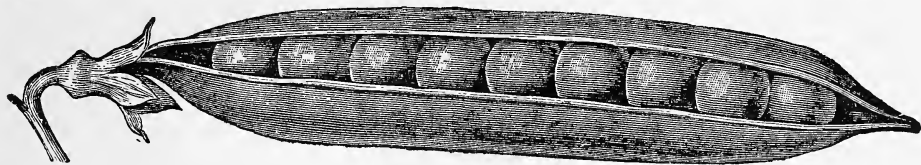
The smallest of all Onion Sets, about the size of a large garden pea. You don't need to set them, just sow in a row like peas and cover about one inch. They make early green onions a little later than regular sets and much earlier than seed. They are especially valuable for growing large dry onions for winter use. Being so small you get all the way from 600 to nearly 1,000 Tiny sets to the quart. Crop matures earlier than onions from seed.

WHITE TINY SETS: Pint, 40c; qt., 75c, prepaid.

YELLOW TINY SETS: Pint, 35c; qt., 65c, prepaid.

All sets figured at 32 lbs. to bushel (1 lb. to quart).

Popular, Profitable Peas for Particular Planters



LONG'S Large, Long, Luscious Laxtonian. Early, Too!

V406. This big, long podded, variety is ready for use as early as the small American Wonder, and only a little later than Alaska. Pods are long but vines are short. Peas are large, wrinkled, sweet, running 7 to 10 in a pod. Vines require no staking; rows may be planted close, to economize space; peas easily gathered by the handful, and the shelling of a mess is a short job, on account of the size of pods and peas. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c; 2 lbs., 75c. Prepaid.

Larger Lots: Not prepaid. See page 22 regarding postage, if mailed. 5 lbs. for \$1.30; 10 lbs. for \$2.40; 25 lbs. for \$5.50. Ask for prices on any other quantity.

LONG'S Montana-Grown Early Giant Pod "Blue Bantam"

V408. Nothing small or "Bantam" about this pea but the vines, which run 12 to 16 inches according to season, soil, water and cultivation. But the PEAS! Fine big pods, usually well-filled, with large and luscious peas. So like Laxtonian in every way that it's a toss-up as to which is the better. You can't lose if you bet on either one. Pkt., 10c; $\frac{1}{2}$ lb., 22c; lb., 40c; 2 lbs., 75c. Prepaid.

Larger Lots: Not prepaid. Same prices as for Laxtonian.

LONG'S Favorite Dwarf Variety for Second Early

V418. DWARF TELEPHONE. A second early pea with short to medium vine, but pods and peas large like Laxtonian and almost as large as Tall Telephone. Just a little later than Laxtonian. One of the best. Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c; 3 lbs. for \$1.00. Prepaid.

Larger Lots: Not prepaid. See page 22 regarding postage, if sent by mail. 5 lbs. for \$1.20; 10 lbs. for \$2.15; 25 lbs. for \$4.75. Ask for prices on any other quantity.

Seven Other Good Kinds

V410. ALASKA. Early smooth pea, standing early planting, but hard to sell after the larger sorts come in a little later. Pkt., 10c; $\frac{1}{2}$ lb., 18c; lb., 30c.

V412. AMEER, or GIANT ALASKA. Almost as early as Alaska, but much larger and better; is also smooth seeded, and will stand early planting. Pkt., 10c; $\frac{1}{2}$ lb., 18c; lb., 30c.

V422. EDIBLE POD. Dwarf Gray Sugar. Pods as well as peas are cooked, like snap beans. Pkt., 10c; $\frac{1}{2}$ lb., 18c; lb., 30c.

V426. EVERBEARING (Bliss). A later sort that continues bearing for a long time, though most other mid-season kinds do also. Pkt., 10c; $\frac{1}{2}$ lb., 18c; lb., 30c.

V428. GRADUS. Called also Early Telephone. Tall vines, large pods and peas. Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c.

V432. LITTLE MARVEL. Early; vine short; pods not large, but always packed tight. Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c.

V436. TALL TELEPHONE. Very tall; pods very large. Pkt., 10c; $\frac{1}{2}$ lb., 20c; lb., 35c.

PETER PAN. Same as Laxtonian.

Culture Suggestions: Peas grow and attain the stage just fine for "green peas" with so little care that they should be planted liberally. The plants store nitrogen in the soil for the crop to follow, and there is plenty of time to grow radishes, turnips, lettuce, beets, etc., after the peas have been used.

Bear this in mind. The smooth varieties, like Alaska and Ameer, may be planted very early, even in February if soil permits. They seldom, if ever, rot in the cold, wet ground. Because of this these kinds are valuable. They deliver the goods early. But the wrinkled kinds—Laxtonian, Blue Bantam, Dwarf Telephone—in fact, all the others in my list, are sweeter and should be planted fairly early. A long spell of cold, wet weather in early spring may cause the seed to rot, but this seldom happens. Your largest plantings should be of these wrinkled, sweeter kinds.

Peas thrive best in the cooler early months of the season, and do not do very well from late plantings. Beans like hot weather but peas prefer it cooler. So plant liberally early in spring.

Sow rather thick, using a pound to about 125 feet of row, though thinner may be best if shy on moisture.

For larger lots, see page 47.

ALL PEAS prepaid at these prices.

LONG'S Crisp Radishes for Home and Market



V135. EARLY SCARLET TURNIP, WHITE TIP. Quick growing variety. Very attractive for bunching account rich red color, except bottom, which is white, as illustrated above. Large pkt., 10c; oz., 15c.

V137. GLASS, or CINCINNATI MARKET. Corresponds to Icicle, but color is red. The best long red. Pkt., 5c; oz., 10c.

V138. FRENCH BREAKFAST. An old favorite of the half long type. Color red, shading to white at base. Soon gets pithy. Pkt., 5c; oz., 10c.

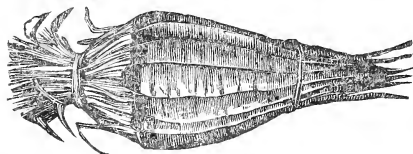
V139. SAXA. New. Exceedingly early bright scarlet round radish, with few leaves. Flesh snow white; very mild. Follow with Crimson Giant, which is a little later and keeps tender long time. Pkt., 10c; oz., 15c.

V140. WHITE STRASBURG. Similar to Icicle but larger and later. Pkt., 5c; oz., 10c.

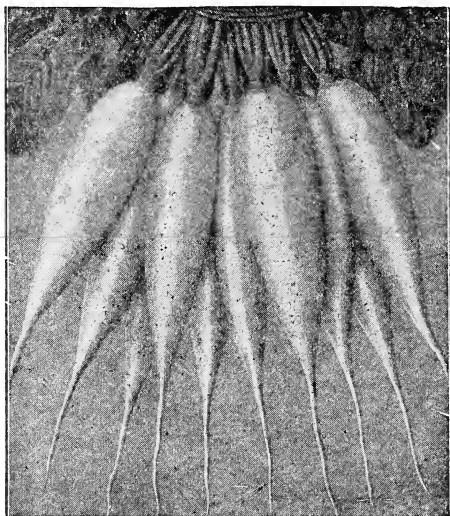
V141. CRIMSON GIANT. Here's a hummer! Round, bright red, growing quickly to bunching size, but will keep right on growing to large size without losing its crispness. I plant Crimson Giant and Icicle from early spring until September and we have fresh, crisp radishes all summer and until late in fall. Select seed. Large pkt., 10c; oz., 15c.

For larger lots, see page 47.

LONG'S Vegetable Oyster



V176. Good substitute for oysters. Sow where may remain until late in fall, or may be left in ground and dug as needed in winter. Large pkt., 10c; oz., 20c; ¼ lb., 60c.



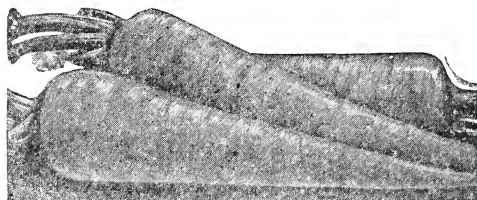
V136. WHITE ICICLE. Not in a thousand years could you think of a better name for this popular radish. The name just fits. Is one of the earliest long radishes, good for sowing every few weeks from early spring until September. My stock of this is very fine. Large pkt., 10c; oz., 15c.

V142. CHINESE ROSE (Winter). Pink, oval or half long. Pkt., 5c; oz., 10c.

V143. WHITE CHINESE (Winter). Very large, mild and juicy. Extra fine. Pkt., 10c; oz., 15c.

For larger lots, see page 47.

LONG'S Parsnips



Culture: Sow early in deep mellow soil, pressing soil after planting.

V126. HOLLOW CROWN. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c; 5 lbs., \$3.00, prepaid.

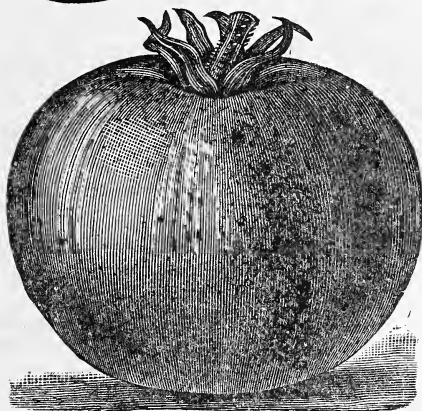
LONG'S Pumpkins

For larger lots, see page 47.

V132. SMALL SUGAR. The good old yellow pie pumpkin. Pkt., 10c; oz., 15c.

V133. LARGE FIELD. Pkt., 10c; oz., 15c.

V134. KING OF MAMMOTS. Largest of all pumpkins, yet good for pies as well as for stock. Pkt., 10c; oz., 15c.

LONG'S Select Tomatoes

Culture: Sow the seed in boxes in the house or in hot bed 6 to 8 weeks before time to set out. Failure to germinate seed is often due to lack of heat. **Tomato seed must be kept warm** to start it. (Same with pepper seed.) If come up thick, thin them at once. "Damping off" is a common trouble and is due to plants being too thick, watered too much, and lacking enough fresh air. When plants have 4 leaves transplant to shallow boxes or cold frames. Gradually harden them off by exposing to outdoor air to get stalky, sturdy plants.

Set plants 3 to 4 feet apart in the garden, water moderately; cultivate well.

Except where noted, all **TOMATO SEED** at 5c, small pkt.; Long's special pkt., 10c.

V154. EARLIANA. Is somewhat small, but earliest of all. Select seed. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

No Tomato Plants by Mail.

LONG'S Early Red Head

V160. Red Head is a "Red that is Red," real early tomato of medium size, almost round, solid and smooth and of good flavor. Sets heavy, and keeps right on bearing during the whole season. As I've often remarked, some vines often so loaded that it looks like a bucket of tomatoes had been poured around the plant. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c; $\frac{1}{4}$ lb., \$1.80.

V155. BONNY BEST. Bright scarlet. Few days later than Earliana, but larger and smoother. Good for early medium and late. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1; lb., \$3.50.

V156. CHALK'S EARLY JEWEL. Deeper red than Earliana, larger and very good. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V157. LIVINGSTON'S BEAUTY. Medium early, smooth, prolific, purplish red. Standard main crop variety. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

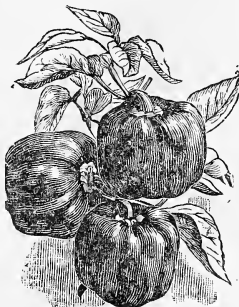
V158. MARGLOBE. Large, smooth, solid, bright red tomato especially resistant to rust and wilt. Developed by Prof. Pritchard of U. S. Dept. of Agriculture. Select seed. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; $\frac{1}{4}$ lb., \$1.40.

V162. PONDEROSA. Largest of all tomatoes, sometimes rough, few seeds. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.20.

V163. BIG JOHN BAER. Similar to Chalk's Jewel. High recommended by our Agricultural College. $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V164. YELLOW PEAR. Small pear-shaped tomato for preserving. $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

V165. GROUND CHERRY. Also called Strawberry, or Husk Tomato. Each fruit in husk. Sweet and fine for preserving or pies. $\frac{1}{2}$ oz., 30c; oz., 50c.

LONG'S Peppers

Culture: Sow $\frac{1}{4}$ in. deep in hotbed or shallow boxes. Follow same suggestions given above for tomatoes. Peppers will not germinate if ground is cold. Plants tender. Set out 12 x 24 inches, after late frosts.

V127. RUBY KING. Large sweet pepper. Pkt., 5c; $\frac{1}{2}$ oz., 25c; oz., 45c.

V128. CHINESE GIANT. Larger than Ruby King. Mild. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 65c.

V129. LONG RED CAYENNE. Pkt., 5c; $\frac{1}{2}$ oz., 20c; oz., 40c. "Full of pep."

V129 $\frac{1}{2}$. RED CHILI. Small, red, very hot. Pkt., 5c; $\frac{1}{2}$ oz., 25c; oz., 45c.

V130. PIMENTO. Mildest of all peppers. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 60c.

V131. NEAPOLITAN. Early. Fruit grow upright. Pkt., 5c; $\frac{1}{2}$ oz., 20c; oz., 40c.

Three New Giant Peppers

V121. HARRIS EARLY GIANT. Earliest of all giant peppers. Enormous fruits nearly 5 inches high and 3 $\frac{1}{2}$ inches through. The deep green peppers turn to brilliant red. Flesh thick and of sweet, pleasant flavor. Fruits begin setting when plants are quite small. Valuable for home or market. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c; $\frac{1}{4}$ lb., \$1.90.

V122. WORLD BEATER. A cross between Chinese Giant and Ruby King, having earliness of latter and size of the former. Flesh thick and mild. Very productive. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

V123. CALIFORNIA WONDER. Similar to Chinese Giant, with remarkably crisp, tender and sweet flesh $\frac{1}{4}$ to $\frac{3}{4}$ ths inch thick. Flavor like that of Pimentos. A little late for sections with short growing seasons, where Harris Early Giant would do better. Pkt., 10c; $\frac{1}{2}$ oz., 30c; $\frac{1}{2}$ oz., 50c; oz., 95c.

Tomato-Pepper

V166. A "What-is-it?" vegetable of fine flavor, combining the qualities of pepper and tomato. Claimed by some a cross; by others a very mild pepper. Pkt., 10c.

Seldom anything gained, often time lost, by setting tomato and pepper plants out before ground and weather warm.

LONG'S Squash**All SQUASH:** Large Pkt., 10c; oz., 15c.

For larger lots, see page 47.

V149. TRUE HUBBARD. The good old green, solid, hard shell, long keeping, fine flavored kind that melts in your mouth.

V150. SWEET POTATO. (Pike's Peak or Sibley.) Large oval squash, tapering at blossom end. Skin olive-green. When baked, resembles sweet potatoes.

V151. DELICIOUS. Varies in form and color, but always good.

V152. WHITE BUSH SCALLOPED. For summer use.

V153. GIANT CROOKNECKED. Best of summer squashes.

V154. BANANA. As name implies, this is a long squash. When baked, the thick golden meat is indeed delicious.

V155. NEW TABLE QUEEN or ACORN. Small but very prolific. Shape suggest name, **ACORN.** Size, 5 to 6 in. long; 4 to 5 in. across. Flavor splendid. Table Queen usually has thin, dark green shell but color varies. Can be baked or boiled in 20 minutes. Served in halves it is most attractive and delicious. Early, yet stores well. Best of all, is far less subject to insect pests than other squashes. Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

LONG'S Turnips

Culture: Turnips do best in rich, loose soil, but thrive under less favorable conditions. May be sown from early spring until August. For main crop for winter use, sow in July.

V169. Early Snowball. Small, pure white, round, extra early; very tender and sweet. Ideal early table turnip.

V170. EXTRA EARLY PURPLE TOP MILAN. The earliest of all turnips. Medium size. Somewhat flat.

All at: Pkt., 5c; Large Pkt., 10c; Oz., 15c.

V171. EXTRA EARLY WHITE MILAN. Similar to V170, but pure white.

V172. PURPLE TOP STRAP LEAVED. Good for early or main late crop. Purple Top Globe is better.

V173. WHITE EGG. Quick growing, egg-shaped, pure white variety, for spring or summer growing. Good size.

V174. PURPLE TOP GLOBE. Similar to White Egg in shape but with purple top. Superior to the old Purple Top Strap, which is flat.

V174½. AMBER GLOBE. Another good globe about same shape as White Egg, but color nearly yellow. Seems to do especially well in the mountains.

For larger lots, see page 47.

LONG'S Best Rutabaga

V175. AM. PURPLE TOP. Color purple above and yellow under the ground. Flesh yellow and solid; few leaves and small neck. Pkt., 5c; large pkt., 10c; oz., 15c; ¼ lb., 30c; lb., 80c.

LONG'S Spinach

V145. BLOOMSDALE, SAVOY LEAVED. One of the best early varieties. Pkt., 5c; oz., 10c.

V146. MONSTROUS LEAVED VIROFLAY. Vigorous growing early kind with large, thick dark green leaves. Pkt., 5c; oz., 10c.

For larger lots, see page 47.

"King of Denmark" Spinach

A new variety from Denmark that has the good qualities of such sorts as Bloomsdale and Viroflay, being similar in growth and appearance, but far superior in that it does not run to seed so quickly. Makes a quick growth of dark green leaves, large and attractively crumpled. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. for \$2.25.

LONG'S Leeks

V788. LEEK. Pkt., 5c; oz., 25c; ¼ lb., 75c.

Okra, or Gumbo

The green pods are used in soups, to which they impart a rich flavor. Sow in open garden but not until ground is warm. Thin to 10 inches. Pkt., 5c; oz., 15c; ¼ lb., 40c.

LONG'S Larger Lots at Lower Prices

Everything except Peas, Beans and Sweet Corn is priced prepaid parcel post. In ordering Peas, Beans and Sweet Corn, add for each pound: 1c for 2nd zone; 2c for 3rd; 4c for 4th; 6c for 5th; 8c for 6th; 10c for 7th; 12c for 8th. I will pay additional postage. (Your postmaster will give you the correct zone.)

BEANS: (Postage extra. See above.)

Brittle Wax: 5 lbs. for \$1.75; 10 lbs. for \$3.25; **plus postage.**

Stringless Green Pod, Ky. Wonder, Henderson Lima, Cream Butter, 5 lbs., \$1.40; 10 lbs., \$2.70, **plus postage.** See rates above.

B. Bush Lima: 5 lbs., \$1.70, **plus postage.**

BEETS

All Beets: $\frac{1}{4}$ lb., 35c; lb., 90c; 5 lbs. for \$3.80.

CABBAGE

Copenhagen Market and Danish Roundhead, select European grown seed: $\frac{1}{4}$ lb., 75c; lb., \$2.00; 5 lbs., \$8.80.

All other Cabbage, except where otherwise priced: $\frac{1}{4}$ lb., 60c; lb., \$1.40; 5 lbs. for \$6.50.

CARROT

All Carrots: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs. for \$4.00.

SWEET CORN: (Postage extra. See above.)

All varieties except "Sunshine": 5 lbs. for \$1.00; 10 lbs. for \$1.90; **plus postage.**

POP CORN: (Postage extra.)

Japanese Rice: 5 lbs. for \$1.20; 10 lbs. for \$2.00. Others same price as Sweet Corn. **Postage extra.**

CUCUMBER

All except V67 and V66: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs. for \$4.50.

LETTUCE

NEW YORK: See page 39.

All other Lettuce: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs. for \$4.50.

MUSK MELON

All but V91 and V91 $\frac{1}{2}$ at: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs. for \$4.40.

Scarlet Runner Bean

Very rapid climber. One customer says it must have been Scarlet Runner bean which grew so fast and enabled Jack the Giant Killer to make his get-away. Blossoms bright red. Beans good to eat, as snap beans. Pkt., 10c; $\frac{1}{2}$ lb., 25c; lb., 45c.

Mammoth Sunflower

Pkt., 5c; lb., 25c; 5 lbs. at 20c; 10 lbs. at 17c; prepaid.

Endive

WHITE CURLED. The variety most used. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c.

BROAD LEAVED. Plain, broad leaves. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c.

Egg Plant

Culture: Start plants in box or hotbed. Do not set out until quite warm weather. Very tender. Ground should be rich.

V68. BLACK BEAUTY. Pkt., 10c; oz., 50c.

WATER MELON

All varieties. $\frac{1}{4}$ lb., 35c; lb., 90c; 5 lbs. for \$3.75; 10 lbs. for \$7.00.

ONION: (Write for prices on larger lots.)

Red Wethersfield: lb., \$1.40; 5 lbs., \$6.50.

Barletta, So. Yellow Globe, Yellow Globe Danvers: lb., \$2.25; 5 lbs., \$10.00.

Silverskin and Ideal White Globe: lb., \$2.50; 5 lbs., \$12.00.

So. Red Globe: lb., \$1.30; 5 lbs., \$6.00; 10 lbs., \$11.00.

Mountain Red Globe: 5 lbs., \$8.00; 10 lbs., \$14.00.

Mountain Danvers: 5 lbs., \$11.00; 10 lbs., \$21.00.

PEAS: (Postage extra. See above.)

Gradus, Tall Telephone, Little Marvel: 5 lbs. for \$1.20; 10 lbs. for \$2.20; **plus postage.**

Alaska, Ameer, Edible Pod, Everbearing: 5 lbs. for \$1.10; 10 lbs. for \$2.00; **plus postage.**

PUMPKIN

Sugar: $\frac{1}{4}$ lb., 30c; lb., 75c; 5 lbs., \$3.25.

Field: $\frac{1}{4}$ lb., 30c; lb., 70c; 5 lbs., \$2.75.

King of Mam.: $\frac{1}{4}$ lb., 40c; lb., \$1.20.

RADISH

Crimson Giant, Early Scarlet Turnip, White Tip (Sparkler Strain), Icicle, Saxa: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs., \$4.25.

All other kinds: $\frac{1}{4}$ lb., 30c; lb., 80c; 5 lbs. for \$3.50.

SPINACH

Bloomsdale and Viroflay: $\frac{1}{4}$ lb., 25c; lb., 45c; 5 lbs. for \$1.90.

SQUASH

All except V155 at: $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs. for \$4.20.

TURNIP

Purple Top Strap and Amber Globe: $\frac{1}{4}$ lb., 30c; lb., 70c; 5 lbs. for \$3.00.

All other Turnips: $\frac{1}{4}$ lb., 30c; lb., 80c; 5 lbs. for \$3.50.

Rhubarb, or Pie Plant

Sow the seed in spring, and transplant where wanted the following spring. Pkt., 5c; oz., 20c.

RHUBARB ROOTS. Each, 25c; 3 for 60c; 6 for \$1.00; prepaid.

LONG'S Kohl-Rabi

WHITE VIENNA. The best. Pkt., 10c; oz., 25c.

Kale, or Borecole

Used for greens. Pkt., 5c; oz., 15c.

LONG'S Herbs—All 10c Pkt.

*Caraway

*Catnip

Coriander

Dill—Oz., 15c

*Sage— $\frac{1}{2}$ Oz., 30c

*Pennel

*Lavender

Marjoram

*Rosemary

Savory

(Continued from Page 22.)

Other conditions often cause bulbs to look like something the cat dragged in. But if you want a surprise, plant some such tough-looking bulbs. Not always, but often they will produce as sound, clean and healthy new bulbs as you could wish. Now please understand I'm not defending real criminals, but just trying to give the under-privileged child a fair deal. I mean to say that while it is regrettable that there are diseased bulbs in commerce, yet we may be misled by appearances.

Much has been said about diseased bulbs. Sometimes I think too much has been said. One thing that has made the Glad popular is that it is so easy to grow, and so free from disease and insect pests. I feel it is a mistake to stress disease too much, lest it cause unnecessary anxiety for the amateur. It is my opinion that the small growers, who buy a considerable part of their stocks each year, need not make a practice of treating their planting stocks. That is, leave this largely to the commercial growers.

I treat my stocks and think most large growers do now, whether they seem to need it or not, just to keep them in good health.

For several years have used the well-known Semesan, a tablespoonful to 6 quarts of water, though double that amount is safe. No set rule as to how long to soak, but I prefer not less than 12 hours for bulbs and bulblets. Have let them stay in the dope for several days. Generally treat just before planting, though treatment may be given any time from when first dug to spring, if bulbs are spread out and dried off quickly after the soaking. I'd hesitate to soak green bulblets, soon as dug, also bulbs after cut before planted. Have an idea shorter time of soaking best if done when bulbs are green. By spring they are "hard boiled" and stand more soaking.

Formaldehyde, one tablespoonful to gallon of water, is also very good. Soak hour to half day, bulblets same, but continue soaking of bulblets in plain water as suggested elsewhere.

Q. What about germinating bulblets?

A. I've talked and talked and talked about this in my catalogues and booklets, but still there is much of value to be said.

For small lots of valuable bulblets I'm strong for pinching and cracking the shells. Instructions for this given on envelopes I use for filling bulblet orders.

For large lots of less expensive kinds I'm getting good results this way: Soak the bulblets several days, preferably in luke warm water. Use thin cloth bags for the bulblets, and have the bag only about one-third full, not over half full. Less is better. Some soak them a week or ten days. The old idea of soaking 24 hours does not get the good results we wish.

But instead of leaving the bags of bulblets immersed in water for week or so, I find it better to soak them a day or two, then take out the bags and lay them out flat so some air can get to the bulblets. But never let the air dry the bulblets in bags. Keep sprinkling the bags, or just souse them in pails or barrels of water a few minutes every day or several times a day. Turn the bags over several times a day. If bags can lie in sun where not too cool, that is fine. Next best in warm room. But even if in somewhat cool room the bulblets will do a lot of preliminary work while in the bags. They will begin to sprout in the bags. May even develop thread-like roots.

Try to time this preparatory work so that you can plant when bulblets begin to sprout. But if rain or snow or cold weather prevent planting at just this stage, don't worry. You can keep them in the bags a while longer,

then sow them, sprouts, roots and all. Is surprising how they grow even if considerably sprouted when sown. Better not plant too early when ground is cold, or cover very deep at first when sowing sprouted bulblets. If do not sprout them, then may plant early, and cover deeper. If sprouted, bulblets may be covered scarcely an inch until begin to come through. May then be covered gradually with fine soil another inch or so. Unsprouted bulblets may be covered two inches, and even hilled up several inches above the level, this ridge raked down just before the plants come through or as they are coming through. Good way to kill lots of weeds before they can make trouble.

Q. Which pays best to grow—a variety that increases fast or one that increases slowly?

A. No one could answer that question right off the bat. Because much depends on the merits of the two Glads. But if both are favorites with Glad folks, and demand about the same, a careful grower need not hesitate to invest in a variety that is a bit hard to propagate and increase. In fact, his skill, if he really is skillful, will pay a premium when applied to the variety that is not so easy to grow. Before leaving this subject I want to add that after Minuet bulblets once get going there is no other variety that grows much more thrifty and robust, or makes nicer, cleaner, healthier bulbs.

Q. What about cutting Glad bulbs before planting?

A. If in doubt, don't cut. Some varieties take to it while others resent this treatment. Only large bulbs, with large area of root surface should be cut, if any. Cut just before planting. First remove the husk from bulb. Then you can locate the eyes. Cut from top to bottom so that each piece has one good strong eye, and a portion of the root surface on bottom of bulb. Cut bulbs should not be planted until ground is warm. The advantage is that each cut portion has room enough to produce a round bulb, whereas, if 2 to 4 bulbs form from a large uncut bulb the new bulbs will be irregular in shape and probably flat on one side. Shape does not make the bulb less valuable but is not pleasing for retail trade. It is generally conceded that some varieties make more bulblets if the large bulbs are cut. Nothing gained, I believe, in quality or quantity of blooms.

Q. When shall I clean my Glad bulbs, and how?

A. Cleaning Glad bulbs is removing the roots and old dead bulb from base of the new bulb dug in the fall. Some call this "rooting" the bulbs.

It is not absolutely necessary to clean before planting the new bulb next spring, but is almost always done. If one is selling bulbs it is done to give the new bulbs a nice appearance, enable one to grade the bulbs into various sizes through screens, and save transportation charges.

The best time to clean the bulbs depends on size of bulbs and how fast they have cured since being dug. If dried rather rapidly in air and sunshine, or in a warm room with plenty of air circulating about them, they may be ready to clean in a few weeks after having been dug. If stored rather damp it may take several months before ready to clean. It is possible to yank off the old bulb and the whisker-like roots any time, but if done too soon this may make a wound at base of new bulb that will start decay. If you wait too long no harm is done, except that the roots do not come off as easily as just at the right time. There is a time or stage when they slip off easily. Bulbs grown from bulblets ready sooner than from large bulbs.

How to Grow Gladioli

The gladiolus is propagated in three ways: by multiplication of the large bulbs, by the tiny bulblets that are found around base of bulbs when digging, and by saving seed that sometimes develops on top of the spike. Stock from bulbs and bulblets comes true to the original, but seed does not. I shall consider the first two ways only in this limited space. Gladioli do not mix from growing near other varieties.

WHERE, WHEN, HOW TO PLANT

Plant in any good garden soil where they will have plenty of sunshine. Don't forget that Glads love sunshine. They do best right out in the vegetable garden, or under same conditions as vegetables are grown. Plant any time from early April until June. Good idea to plant some every two weeks to keep a supply of flowers coming on all summer and fall.

They bloom in about 90 days from planting, depending on variety, vigor of bulbs, depth planted, culture, season, etc.

As I've often said, "Standing room only" is all that Glads require. Mass them in rows or beds, setting the bulbs 4 to 8 inches apart. If in rows, set double or triple rows. Dig trench, set bulbs where wanted, fill trench and job is done.

Cover small bulbs about 3 inches, larger ones 4 inches. The new bulb is formed on top of the one you plant and if too shallow your flower spikes will blow down. Deep planting saves staking. Hilling up around the plants also helps to prevent blowing over.

Cultivate between rows, and plants in the rows, often, keeping soil loose and porous. Water frequently. Glads like lots of water, but with good cultivation will get along with less water.

USE GLADS FOR CUT FLOWERS

While Glads make a nice display in the garden, yet they are much more valuable and satisfactory as cut flowers.

Cut them as soon as the lower blossom opens. Cut stem so as to leave 4 to 6 leaves on the plant to mature the bulb. Place in vase of water and the buds will open from day to day just as they would in the garden. As the lower blossoms fade, pull them off, so as to keep the bouquet looking tidy and cheerful.

Keep watering the Glad beds after flowers are cut or have quit blooming, so as to mature the new bulbs. These do a good part of their growing after flowers appear.

DIGGING AND STORING THE BULBS

After frost in the fall, dig the bulbs and cut stem off at once close to the bulb.

Save the larger bulblets of such varieties that you care the most for. Do not expose the bulbs to hot sun or frost, but they may dry a day or so in the shade. Hang up in porous bags—a common sugar or burlap bag is very good. Or, use shallow boxes. Store thus in cellar or any place where they will not freeze or get too dry.

HANDLING THE BULBLETS

Before planting remove the old bulb. Plant the bulbs and bulblets separately. Sow bulblets thick in a row like peas, 50 to a foot or two of row—and cover about one inch. Soak bulblets—not bulbs—5 or 6 days before planting. Water should be kept luke warm. Keep them thoroughly wet after planting.

These bulblets will make small bulbs by fall, which, planted again the next spring, will mostly bloom and all should make ideal bulbs for the year after that.

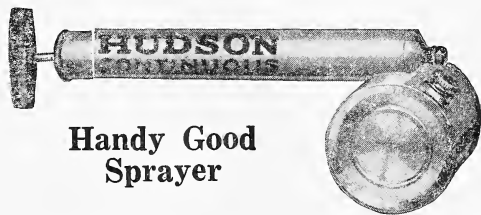
Cinnamon Vine Roots

Hardy, rapid-growing climber, covered with beautiful glossy heart-shaped leaves and a profusion of sweet-scented flowers, perfuming the air for a long distance. Plant early in April to middle of June, 6 to 10 inches apart. Lay roots flat; cover about 2 inches. Protect by mulching the first winter. Vine dies down each fall, starting again in spring. If eye is broken off, new eyes will develop in short time. 2 for 25c; doz., \$1.25, prepaid.

Long's Shasta Daisy Roots



Hardy perennial, blooming nearly all summer, the plant increasing in size and strength for several years, when the large clump then formed may be divided and reset. 2 for 50c; 5 for \$1.00; prepaid.



Handy Good
Sprayer

Operates continuously on both the up and down stroke. The spray nozzle is adjustable from solid stream to a fine mist. Working parts of brass and removable for cleaning. Heavy tin, quart size. Ea., 90c, prepaid.

SULPHO TOBACCO SOAP—Much used for spraying roses, sweet peas and many other plants. Is a contact spray for lice. 3-oz. cake, 10c; 8-oz. cake, 25c, prepaid.

ARSENATE OF LEAD—This, also Paris green, and "Black Leaf 40", can most likely be bought from your local dealer to best advantage, as both not mailable.

TOBACCO DUST—Scatters and drives away bugs on melons, cucumbers, etc. Good idea to have this on hand. 2 lbs., 35c; 8 lbs., \$1.00; prepaid within 4th zone.

FLOWER CITY PLANT FOOD—Concentrated fertilizer or plant food especially recommended for house plants. Pkg., 25c, prepaid.

Over the Back Yard Fence

Well, folks, I trust that by the time you get this far, reading my little old home-grown catalogue or Garden Book, you have picked out a nice order to send me.

Knowing so well the quality of my stocks of seeds, bulbs and plants, I just naturally feel that anyone who has any sort of garden at all would find pleasure and profit in growing few or many of the good things listed in the foregoing pages.

On the one hand, it would be silly for me to pose as a philanthropist or Santa Claus. So I'll say frankly that what I want—what I need and must have, is orders—lots of orders, and many of these must be good fat orders, if I'm to keep calling on you every spring and fall.

On the other hand, anyone who really cares for a copy of my catalogue is welcome to it so long as my supply lasts, whether you ever order anything or not. If you get some entertainment and help from these pages, I'm mighty glad to know it. And that's the point. I want to make every catalogue more than a descriptive price list.

That's why I'm devoting all these pages to informal talks and suggestions.

Some of my good and well meaning friends—hard headed, hard boiled business men—say I ought to use all this good space to list, describe and sell more goods, and send the helpful suggestions only to those who buy. And there's some sense to that, too.

But I'm kinda sot in my ways, and have an idea I'll just keep on doing as I please, which is to help you in this way with your garden problems, whether you buy from me or not.

Informal—No Highbrow Stuff

It's my purpose to make these talks very informal—just sorta like I stopped hoeing in my back yard and went over to the fence to swap experiences with you in your garden, without dolling up before calling on you or rehearsing any fine flowery speech, logically arranged and grammatically correct.

I'll leave it to the magazines to tell about English gardens, Japanese gardens, Italian gardens, sunken gardens, and roof gardens. Many of these phases have their place. But somehow I feel that what you want most right now is a few hints about some of the more common and practical points. Or, perhaps to be reminded of some things you really do know, but may overlook.

Before going a step farther I want to have a clear understanding about one thing in this connection.

I don't promise to continue these talks from year to year. I may quit any time. There is one thing that might cause me to quit. There's a growing tendency for customers to think that because I give so many helpful suggestions in my catalogue I will answer questions I not covered in these talks.

This I am not in a position to do. I carry a heavy load, and every year it seems to grow bigger and heavier. It's a real man's job to look after my gardens and seed store, with ten thousand and then some, details. My success, and yours, depends upon my doing this work right. And that comes first. So don't write me about individual garden problems. Write your garden and farm magazines, your county agents, your agricultural colleges, or ask your neighbors. There's a lot of information to be collected here and there in this way. Better be swapping garden experiences than discussing all the details of current scandal and crime.

So that's that. Now that we understand the situation, let's go on with the story.

I wonder—is it necessary for me to spend

much time explaining the advantages of having a garden, a good garden, and improving the home surroundings? Seems like this is so self-evident that no long-winded plea for the home garden has a place here.

And yet, there are the most interesting and fascinating discoveries awaiting you! Yes, right there in that garden you have been hobnobbing with for years, perhaps. There are new and different varieties of vegetables; there are flowers, the form, size, color and beauty of which you may never have believed possible. Is it any wonder that gardening is becoming such a favorite pastime and hobby? One thing I like about this sort of hobby is that it isn't a one-man hobby. The whole family can ride with Dad, when he makes gardening his hobby.

Gardening Is Easy—It's Fun!

Now, let's see—where had we better commence? Well, suppose I tell you that I think many of our garden talks, cultural directions, timely tips, and so on, are too serious. We make it too hard, or seem too hard, to succeed. We may scare some aspiring gardeners out of the garden altogether.

It is true that there seems no end of things that should be learned and practiced, in order to get the best results. But, on the other hand, it's really amazing and certainly gratifying to note the worth-while results attained by inexperienced gardeners, even children, who make what would be considered great blunders, by others better informed. It's another case of "Ain't Nature Wonderful".

Nature certainly does come along and patch up a lot of our mistakes. To be sure, the more we can learn about Nature's ways and methods, and co-operate with her, the better. But, let's shelve the idea that there is any great mystery about gardening. It isn't hard. It's easy. It's fun, when you catch the gardening spirit.

As you will notice, these talks are more for the small gardener than those operating on a large scale. Commercial growers are usually pretty well informed along these lines. But if any gardener, large or small, fails to find at least one helpful tip in these talks, just mention it to one of the ushers as you pass out and your money will be cheerfully refunded.

Finding Room for Gardens

I'm up against a certain handicap in trying to fit suggestions to conditions in your own particular locality, for this reason: My catalogues go to customers scattered pretty generally over the whole United States and Canada. What I say about spading up the ground in fall and letting it freeze over winter doesn't help my friends in Florida and southern California. And you folks living where you get so much natural irrigation from the clouds, and where evaporation is very slow, can't appreciate the problems of our gardeners in Colorado and other places where we have almost perpetual sunshine, some rains, but very rapid evaporation. Therefore, you will have to pick out what you can use from the ideas I try to put across, and adapt them to your own conditions of soil and climate. Some thoughts will have to be remodeled or revamped. As Jeff has so often put it, "Use discretion", always.

Now where shall we have that garden of yours? Not much choice, as a rule. Have to take the space at hand and make the best of it. As for space, maybe you can find more by spading up some of the neglected corners or waste places. Often a few feet along both

sides of the lawn can be used—less grass and more flowers. As a rule it is better to use such space, stolen from the lawn, along the sides or lot lines, rather than to have beds in the body of the lawn. However, this is largely a matter of personal preference and fitting the flower beds to the individual yard. Often flowers can be worked in around the shrubbery. Tulips and other fall bulbs are especially adapted to this handling. Planting in borders or in groups, according to room and arrangement of shrubbery will produce pleasing effects.

Then again, it may be that a judicious or even drastic pruning of trees will help wonderfully in making two flowers bloom where but one bloomed before. Or, maybe none bloomed, because of too much shade.

Preliminary Soil Work

The kind of soil, its mechanical condition and fertility, is another important matter. Here again we have to work with the material at hand, as a foundation. Unfortunately, the soil near the average house and just where you want your finest display of posies, is the worst on the premises. This because much of it has been placed there in excavating for the basement of the house. But there is nothing serious about all this. I've taken the most wornout and unpromising soil and brought it up to a high state of friability, fertility and productiveness. Takes some time, work and expense, to do a good job.

If top soil is too light and sandy (which is seldom the trouble) you can improve it by having some stiff or clayey soil hauled in and mixed with it. If the reverse is the case (and more often it is), then you can subdue it and make it easier to handle, in several ways. If to be had, get some very fine sand, or silt, and put this on your garden 3 to 6 inches deep. Then plow or spade it under and turn it up again and keep working it over and into the native soil. The beneficial effect will last for years.

Other methods, and they can be used singly or combined with each other or this sand or silt plan, are: Working plenty of coarse manure, leaves, or even plain straw, into the soil. This is best done in the fall. Here again, the operation of replotting or respading several times to get an even distribution of the manure is helpful. But can be done several months apart. Might catch an open spell in winter for one operation, another early in spring, and so on. If soil especially stiff and stubborn, you might sacrifice a whole season's use of it, so as to incorporate an extra heavy coat of manure or straw into the soil. Employing what is known as green or vegetable fertilizer. This is the growing and turning under of green crops, such as peas, rye, barley or sweet clover. The greatest of these for loosening up soils is sweet clover. The white blossom biennial is considered best by many authorities. But if sown early in the spring and kept well-watered during the summer it will do its work in one year instead of two, though leaving it the second year if you can spare the ground is still better. Should be turned under before stems get too woody. The decayed vegetation of this or other green crops acts as a fertilizer as well as to help loosen the soil.

In fact, the trouble with most soils that are not productive enough is often not a lack of plant food, but a mechanical condition of the soil that does not liberate the elements needed by the plant. Thus the adding of humus through coarse manures, straw, leaves, green crops, corrects this condition and liberates the needed plant food as well as renders the soil more pervious to water, which is

needed to dissolve these elements the plants require and make them available or digestible. All of which is a longer story than we can go into fully here. But I've given a good deal of space to this, to start you to thinking and acting along these lines.

Watch Your Step, When Ground Wet

But there's one thing we can all do, at no expense, to help keep the garden soil in good condition for germination of seed, growth and development of plants, and ease in cultivating the crop. That is to avoid working the ground, or walking on it, when the soil is wet. Keep off, and hold off digging, planting or cultivating when ground is too wet. This applies especially to heavy or clayey soils. To test, squeeze some of the soil in the hand. If it sticks together pretty well it is just right for making mud balls, marbles or bricks, but in a bad way for preparing for a seed bed. The one exception to this is late in fall, just before freezing of ground. Then it is desirable to spade or plow the ground when somewhat wet, for it will disintegrate or pulverize better with alternate freezing and thawing during the late fall and winter.

Many visitors to my gardens think I'm grouchy because I refuse to let them run pell-mell up and down the rows of my glads and other flowers. There's a reason, and it isn't that I'm especially grouchy. Don't walk on the soil near your growing plants more than you have to, whether ground is wet or dry, but least harm done when it is dry. Keep in paths or around the edges unless cultivating or picking vegetables and flowers.

Later on I'll have something to say about "Garden Strategy", as I call it. Meaning doing the right thing at the right time, thus saving a lot of work, making what work you do more effective, and co-operating with Nature, letting her work for you even though she isn't on your payroll. I'll also try to help you "Pester the Garden Pests" after they have actually arrived.

These two subjects are closely related at times. For instance, the best time to pester some of these pests is not next summer after they show up, but right now, late in the fall and at such times during the winter as soil and weather conditions will make this not only possible but easy. (I'm writing this early in December. That's how I happened to say "now".)

Take the Cut Out of Cutworm

Take cutworms, for instance. Every season I hear complaints about the activities of these extravagant epicures of the garden. Extravagant because they eat so small a portion of the plant they ruin. Perhaps I should knock on wood when I say it, but whether it is proof of my theory or just fool luck, the truth is I almost never notice any damage from cutworms in my own gardens. If I didn't hear about them from others I might forget there are such "varmints".

And this is the way I pester these and many other garden pests. I don't quit my garden work just as soon as I harvest the crops. Just look at the average garden, and you will see how many gardeners drop everything as soon as the returns for the season are all in. My plan is to stay on the job until we get the whole garden or gardens cleaned up. All dead plants and trash not suitable for plowing under is cleaned up and burned. We give special attention to the edges, corners and outlying districts where garden pests may already have taken apartments for the winter or would like to find protection there.

Many garden pests prepare, in some stage or other, to protect themselves in the soil, at

various depths below the surface. I realize that it is a cruel thing to do, but I wait until very late in the fall, when these pests have satisfied themselves that they are well-located for the winter. Then I plow the ground deep, turning up many of these undesirable citizens to the winter elements, which work while I sleep, and cause great mortality in the garden. I haven't this thing figured out to a fine science, but so long as it works and so long as the humane society doesn't get after me, I propose to continue this heartless cruelty.

Let Nature Do the Work

This, however, is but one of the two main reasons for late fall plowing. The other is that it puts the ground in much better shape for the next season's crop than can be done by allowing the garden or field to lie flat and sodden over winter, then do all the work on it in spring. At least, you can put the soil in shape with less work. This because when thus turned over, loosened up and left somewhat rough, the soil will respond to Nature's freezing and thawing, which gradually pulverizes it better than can be done any other way, many times. Large lumps should be broken up, but the fall plowed ground should not be leveled off smooth. One reason is that when rough, little soil will blow away if high winds occur when ground is dry. The other is that the action of the frost is better if surface not smoothed and packed down until spring.

Learn More from Other Sources

Really, I didn't intend to say so much about garden pests. I fear some faint-hearted gardeners may quit before they start if hear so much about this phase of gardening. So I'll say that these pests come and go. Sometimes we may have them, or some of them, sometimes not. One locality may be troubled one season with one sort of pest while another may escape altogether or entertain some other kind. The Big Idea about mentioning them at all is to help you outwit them or head them off so far as can be done, and also to post you on what to do in case they threaten to make serious trouble. To a large extent, we can forget them in our garden enthusiasm. Just sorta keep them in mind always, and be ready for them if a pitched battle occurs. Refer to page 59 for detailed suggestions as to best ammunition and how to use it.

Space does not permit me to give specific directions for planting and caring for each kind of vegetables and flowers. That would require a whole book, or even a good part of a "five-foot shelf", for there is no end to what could be said and learned in connection with this big subject.

My idea is to cover the ground in a general way, and help you get started to thinking, investigating and experimenting yourselves. Then, for good measure, I'll go into details regarding the care of some of the flowers that are grown in most gardens. Here and there also, you will find some tips and pointers for the vegetable garden as well. With so many good flower and farm magazines to be had now at small cost, we can all glean many valuable helps from many sources.

Pansy Pointers

A little shade for pansies is good, but too much shade will cause tall, soft plants with few or no blossoms. Most all my own pansies are grown right out in the open garden with full exposure to sun. This means somewhat smaller blossoms during the hot summer days, but marvelous blossoms and great quantities of them in spring and fall.

Soil for pansies should be good and rich if possible. If can not be made so before planting, then a few top dressings of sheep or other manure, or bone meal, will help a great deal. Ammonium sulphate, to be had at any Ford garage, is also good. Any or all these can be used from time to time. Avoid fresh poultry manure, for it may burn the plants. So will too much of some other fertilizers. Use little and often when giving top dressings.

Pansy seed may be sown right out in the open garden any time in early spring as soon as you begin your first gardening. The plants will bloom from early June until hard-freezing weather. Just mere frosts will not stop a pansy bed from blooming. Here at Boulder we often pick pansy blossoms every month in the year, though sometimes may skip December or January, or both. The point is, that pansies are cool weather plants and don't need to be coddled and fussed with a great deal.

The seed may of course be started indoors along in early March or even February, and plants set out later on. In that case, keep the plants rather cool, so they make good roots but do not develop tall spindling plants. Thin out or transplant if seem too thick in box. Set box outdoors to harden plants when weather permits.

Pansy seed takes 11 to 20 days to germinate. The soil must not dry out during this period. Cover seed about $\frac{1}{4}$ inch.

Another good plan is to sow pansy seed in the fall. I sow every ten days from early August to September 20th. The reason I sow at intervals like this is to have plants suitable for taking up and shipping, from March to late May. The earliest sowings make good husky plants by time winter sets in, while the latest sowings produce tiny plants that will develop to best transplanting size in May.

For years now I've made a specialty of supplying these seedling plants, well-rooted and wintered outdoors, at such reasonable prices that many gardeners just let me grow their plants instead of buying seed and caring for the little plants themselves. However, it is still cheaper of course to start with the seed. Not a bad idea to get some plants and some seed—the plants for your early spring blossoms and the seed to supplement this early start. The best pansy plants to buy, in my opinion, are the toughened outdoor plants that will bloom soon after being set out. I always pick off blossoms and buds if set out blooming size plants, so one might as well use plants not in bloom. The immediate effect of plants in bloom is more than offset by the cost, and the later performance. Smaller plants adapt themselves better and usually prove more satisfactory.

After pansy plants have bloomed luxuriantly for a while in rich soil, and have been mauled over a good deal in picking the flowers, they get tall and ragged, and flowers not so large. Then I shear off the beds within say an inch and a half of the ground. New sprouts start up at once and in several weeks the beds again begin to bloom, and plants are more compact and sturdy. In picking pansy blossoms I always take part of the branch as well as the stem. Thus the branch, leaves, stem and blossom, make a cut flower one may never have believed possible from a pansy bed. And it doesn't take many such branches to make a nice-sized bouquet. Cut this way, pansies can be used in vases, and last a number of days. Taking the branch, down within two inches of the root, is good for the plant. Others will grow.

I know of only three pansy pests. One is a special pansy worm, not numerous, and can be dealt with by hand picking, though arsenate of lead could be used. Lice and red spiders

are the other two. Lice can be controlled by frequent spraying with tobacco solutions, mentioned elsewhere. Presence of ladybugs indicates lice. The ladybugs will, if plentiful enough, clean up the lice. Don't kill the ladybugs. Red spiders protect themselves with their fine webs, so it is hard to deal with them. Best method is frequent sharp spraying close to and all over and under the plants, with hose. They can't stand much of that.

Our Boulder climate is milder than in many places, though we do have real winter at times. Some of my older and stronger pansy plants are just left to rustle for themselves. I don't cover them at all, and they usually come through all right. The smaller ones, from fall-sown seed, I usually cover with excelsior, torn to shreds and spread over the beds just so it hides the ground—simply to prevent soil drying out and thawing out too much, and keep the winds from whipping the plants. This covering is held down by poultry wire well-staked along each side. My beds are 120 feet long and 3 to 4 feet wide. I use the excelsior on the very smallest plants from latest fall sowings. Other beds are covered by throwing the old dahlia and zinnia stalks over them. I'd use brush, too, if I had it. All covering comes off very early in spring, to keep the plants tough. Tops of plants thus wintered are tough and sure look tough at first, but the roots are strong and if the roots are good the tops soon come on fine and dandy.

Dahlia Don'ts

Don't plant the whole clump that you dug up last fall. Divide it so as to leave an eye or two on each tuber. The eyes are located near where the tubers join the base of stalk, and nowhere else. Not like potatoes, that have eyes other places than the one end.

Don't plant a tuber with badly bruised or broken neck. Many necks are ruined in taking up, storing and handling the clumps. The neck is the slim portion near the place where tuber meets the base of stalk. Some tubers, though, are almost round and have no well-defined neck.

Don't plant tuber in upright position. Lay it flat instead. Cover about 4 inches.

Don't plant before ground warms up. Gladiolus bulbs may be planted very early, but dahlias are much more tender. In our section we plant from about April 20th to middle of June. May best month in most places.

Don't forget your dahlias after planted. They may need a little watering to bring them up. Do not need heavy irrigation at this stage, however. Begin hoeing or cultivating soon as plants are up, working soil deep at first, but more shallow when buds begin to form. Many hair-like roots run far out from plants and very close to surface. Too deep cultivating cuts them off.

Don't set tubers closer than 13 inches in row and rows closer than 3 feet. More room may be given, but dahlias will thrive as close as this in good soil and with care.

Don't worry about having to stake dahlias. You can keep your plants bushy if you wish, by pinching them off after 3 or 4 sets of leaves have formed. Pinch or cut out the top of plant, leaving 2 sets of leaves, from which points side branches will be sent out. A second pinching off may be done if you wish to keep the plant still lower.

Don't get the wrong idea about the size and value of a dahlia tuber. Amateurs frequently think that the larger the tuber the better, and that a small tuber will not make good. Often the reverse is true. For one thing, different varieties make different size tubers. What might be a small tuber of

Millionaire, for instance, would be a large one of Rosa Nell. Professional growers pick out and plant the smaller tubers. They produce good roots and more new tubers, as a rule, than the large roots or tubers. We commercial growers cut off and plant only a part of large tubers, using, of course, the end that has the eye or eyes.

Don't cut dahlia blossoms during the heat of the day, if can avoid it. Very early in morning or late in evening much better. Plunge the stems in cold water soon as possible. Spraying backs of blossoms several times a day will help keep from wilting. Burning the cut end of stems or plunging them into several inches of boiling water also helps keep the flowers. Don't let steam injure blossoms. Hold them to one side.

Don't be rough with your dahlia roots when take them up in fall. Handle like soft-shelled eggs, to prevent breaking or injuring the slender necks of tubers. Take up after frosts have killed tops.

Don't break your back storing all the dirt that comes up with clump of dahlia tubers or burying them in sand or soil, unless you crave exercise. Is all right to store this way, but not necessary. Gently tap the stalk near roots, after digging, and most of the soil will drop off. But if sticky, turn the hose on and wash roots clean.

Don't let the roots dry enough to shrivel them at all before storing. We pack in barrels well-lined with newspapers, then watch and if top tubers show signs of shriveling we throw papers or old sacks over tops of barrels. This is in a dry basement. You will have to suit your methods to your own storage conditions. Before packing away, cut off stalk within inch or two of clump. Then pack the clumps upside down so any moisture in remaining part of stalk can drain out. Watch clumps during winter and give more air or less as needed. Even if dry and shrunken, they will often grow all right. Divide in spring before planting.

Don't think that dahlias will mix, planted close together. They will come true from the divided clumps, but seed never comes true.

Don't buy dahlia tubers on price basis only. There is a vast difference in the sort of tubers sent out by various growers and seed houses. Some tubers will make good and some will not. At best, some may fail, but most of us will gladly help you out in case of bad luck, even if the tuber was not at fault.

Additional suggestions will be sent with tubers ordered.

How to Grow Asters

The aster does best when brought to flower late in the season. It comes in after many other flowers have come and gone, and will bloom right up until rather heavy frosts. However, a succession is desirable, and can be had in several ways. By planting seed at intervals of several weeks from March indoors to last of May outdoors, you can prolong the aster season a number of weeks. Planting early and later varieties at the same time will also accomplish this to a considerable extent. My mixtures of various kinds in separate colors and all colors mixed, contain varieties that will not all bloom at once. Royals are medium early, Crego and Astermum a bit later, and Boulderado Beauties largest and latest of all.

Asters transplant easily and may be started indoors, but do very nicely sown outdoors any time after early April. They stand quite a little cold. Read about germinating small seed elsewhere. Plants should be set or thinned to 6 to 10 inches in the row, and

rows a foot or more apart. Extra rich ground may cause stem rot. Fairly rich ground is good, but should not be given fresh manure. Just good garden cultivation and watering should produce a fine crop, though more or less of the plants may be taken with the blight, for which there seems to be no definite preventative and no cure. This, like some insect pests, is worse some seasons than others. Some sections escape altogether every year, while others may suffer some seasons. Planting on new ground, and in partial shade often helps. East side of house or other building is good location for asters. Avoid overwatering. This often causes the "yellows" or blight.

Strawberry Suggestions

The evolution of the Everbearing strawberry means a revolution in the growing of this most delicious and popular fruit.

In some sections the spring or June bearing varieties will still be grown on a large scale. But for the home garden and now for market growers also, some of the larger improved Everbearing kinds are fast supplanting the old sorts that one has to care for a whole year with the hope of picking berries just a few weeks. I say the hope of doing so, for in many localities late frosts may leave little or nothing for the year's labor and expense.

If you grow Everbearing strawberries you don't lie awake nights worrying about possible damage from frost, hail or high water. If one promising picking is frozen your loss for the year is only partial and comparatively small, for the plants will soon bloom again and produce many pickings during the balance of the season. And the season for Everbearers lasts until way late in the fall.

NEW AND BETTER EVERBEARERS

Formerly one of the weak features in connection with Everbearing varieties was that the berries were too small after the first season. I have seen large patches of the well-known and popular Progressive, for instance, loaded with berries the second year, but on account of berries being small it was hard to get them picked at a profit. But it does seem as though some of the old kinds have sort of run out and can not be depended upon as formerly.

Fortunately, there are some newer sorts to be had now that produce a very satisfactory crop the first season, and also are keen competitors of the June bearing varieties the next spring, the berries being large and fine, bringing top prices. Then these Everbearers continue to bear, with short resting periods, all summer and fall. They will of course bear again the year after that, but it is doubtful if it pays to leave a bed more than the two years. The two varieties that I have selected from many tried out are Pride of Denver and Mastodon. Both these are "perfect"—do not need fertilization from another kind.

Give your strawberries rich, well-fertilized ground. They are heavy feeders. Rich soil and lots of water are two main requirements. Frequent cultivation is also important. Artificial watering can be given either by running water along the rows or by overhead sprinkling. I can't see any particular difference in results if you are sure to give the plants a good soaking and often.

Set plants on level ground, not on ridges. Space the plants 12 to 18 inches in the row and rows 24 to 42 inches apart, according to method of cultivation and space you can spare. If to be worked with horse-drawn tools, make rows 36 to 42 inches apart.

PLANT EARLY IF POSSIBLE

Before setting the plants, trim off all foliage except a mere leaf or so. Also clip off the tips of the roots. Tiny roots will branch out from these clipped ends. Set plants with crown level with ground, and pack ground very tight around the roots, excluding all air. Water each plant heavily soon as set and keep soil wet for several weeks. Pouring water in each hole before planting is an excellent plan also, one of the best. Spread the roots out fan-like, rather than stick them in all in a wad, tangled and twisted.

After plants begin to take hold and show signs of growth, begin careful hoeing about them. Guard against hoeing into the roots to loosen them. Often when growth starts it will push the plant up, exposing too much of the crown and part of the roots. To prevent this, go over the patch and tramp around each plant with toe or heel, packing the soil and drawing some more soil up to the plants if seem to need it.

SEVERAL METHODS GOOD

Some growers use the hill method, never allowing runners to set, but cutting them off as fast as appear. This leaves a large plant, clump or bush where original plant was set. It is one good plan. Others prefer to let a few runners set and train them into a sort of row or hedge, keeping all surplus runners cut off, and a clear space between the rows. Still others let all runners have their own way. This is not a good plan unless you are growing for plants more than for berries. If many runners are allowed to set, it is a good idea then to dig out a good many of the plants if bed is allowed to remain more than two years, or even take some out in spring of the second year. Remove where thickest. I usually remove the old or original plant. Dig around the plants and work in a top dressing of fine manure, bone meal, Ford fertilizer, or some of each. Such top dressing good any time. Not much at a time, but every few weeks or so, near the plants, but not in the crowns.

If you receive plants real early they will probably look very bad, and even appear almost lifeless. That is because they are practically dormant. But they are really better for setting out then than later on when have luxuriant foliage and look much more promising and pleasing to the eye. So don't worry about appearance of plants.

Keep blossoms picked the first season until along early July, to give the plants a good start. Finally, don't expect every plant of an Everbearing variety to bear, or all bear at same time. The best Everbearing kinds are results of crossing with the large June varieties, and some plants will revert and bear only in June. The proportion is seldom large, but this is likely to occur. Some additional suggestions will be sent with our shipments of strawberry plants.

In our Boulder climate, I never cover or mulch strawberry plants in winter. Doubt if necessary in many sections. But if you do mulch them, then wait until very late in fall, preferably until ground has frozen a little. Then put coarse manure, hay, straw, excelsior or tomato vines over the bed, but not much, if any, right on top of the plants. Work it more in between the plants. Remove very early in spring.

Improvements

"Little beds of flowers,
Little coats of paint,
Make a pretty cottage
Out of one that ain't."

How to Grow Giant Zinnias

Get seed of the marvelous Colossal and Dahlia-Flowered kinds, from some good source. Big difference in stocks. Ours is grown by the firm that specializes in Zinnias and has originated many of the best varieties to date.

Zinnias are so easy to grow that there's almost "nothing to it". For largest blooms, the ground should be rich, and after plants begin to bloom they should have an abundance of water. Sure, ground must be cultivated, until plants in full bloom.

Just sow the seed out in beds where you wish the plants to bloom, though plants may be transplanted also. Sow seed thin, one seed every few inches. Cover about $\frac{3}{4}$ inch. Keep soil moist to germinate seed. Sow about ten days before usual date for latest frost. Thin plants to 8 or 10 inches, or even more, in the row. Rows about 2 feet apart.

How to Grow Cannas

Cannas thrive best in warm climate, sandy soil, full sunshine all day, and with plenty of water.

Canna bulbs or roots are slow to start, but make rapid growth later on when weather gets warm. Set the roots as close as 12 inches apart, if you wish. Plant soon as ground warms up, about middle of April to May 1st, or even later. Cover 3 or 4 inches. Frequent cultivation and plenty of water should be given.

After fall frost, cut tops off close to ground, dig and store safe from frost, in somewhat damp cellar. Or, if cellar is dry, sprinkle the roots once in a while during the winter. May be packed in boxes or set on floor. Throwing old sacks or papers over them will prevent drying out. Dirt may be left on or removed. Each spring planted single root makes a clump by fall. These are easily pulled apart the next spring before planting. Any piece with an eye or bud will grow, regardless of size, shape or appearance of roots.

Concerning Fertilizers

In addition to turning under green crops, mentioned elsewhere, use other fertilizers from time to time. Stable manures are still to be had in many places, but not everywhere. Easiest to get in fall. Demand greater in spring. Any barnyard manure is helpful in the garden, just so not too fresh and not applied too close to plants and bulbs. Beware using fresh poultry manure. Very dangerous.

Pulverized sheep manure is excellent, and quite safe to use, as not likely to burn plants. Use as top dressing near plants during growing season. Your local seed or feed store can get this for you. Commercial fertilizers of various kinds, as well as Ford fertilizer, and bone meal, good for working into soil when preparing ground or as top dressings. See Ford garage for Ford fertilizer. Use sparingly. Get the steamed bone meal. It acts quicker than the other kind.

"Irritating the Garden"

One summer evening a caller at a Boulder home asked the little girl who came to the door: "Is your father home?" "Yes," replied the little miss, "he's in the back yard irritating the garden." Of course, the caller found this man sprinkling the garden with the hose. But the little girl may not have

been so far off after all, in using the word irritating for irrigating. It is a fact that many gardeners do just about that—squirt just a little water on the garden and lawn which does little more than irritate the growing plants. Tiny plants do need just a little light sprinkling at a time and often. But when plants are larger they want a good thorough soaking once in a while, then want to be left alone a few days, maybe a week. Is far better to give a good watering, then cultivate as soon as ground is dry enough, than to just keep irritating the garden with daily light sprinkling, which brings the feeding roots close to the surface instead of keeping them at work lower down.

Strong Talk About Mild Onions

One thing I never do is to promise any one that a certain onion is very mild. Some kinds naturally milder than others, but any likely to be hot. Depends a lot on how grown. If growth is rapid, with plenty of water, the onions will be milder than if plants stunted, growth slow, and water insufficient. Several of our customers have reported that they find Mountain Red Globes milder than some other kinds. But why a mild onion anyhow? If want something real mild, eat an egg plant, or mushroom.

In growing onions for market, use discretion. Don't grow too many of the Bermudas produced from onion plants. They are fine, but the onions must be marketed soon after matured. Can not be kept for rise in price like the standard sorts grown from seed, such as the Southport Globes, Silverskin, Danvers, Mt. Danvers, and Mt. Red Globe.

A COMMON ONION ERROR

According to Webster:

Scullion is a menial kitchen servant who washes kettles, scrubs floors, and the like.

Scallion is a shallot, leek, or other onion that does not form a round bulb, hence, also an onion that has failed to make a slender, well-ripened neck, a thick-neck.

Better Than Agreed

There are a number of biennials and perennials that are usually described as blooming the second year from seed, and not thought of as likely to compensate us any the first year. But it is surprising how some of these do bloom the first year also, especially if planted early. Snap Dragons, Margaret Carnations, Sweet William, Delphinium, and many others bloom very nicely the first season from seed sown outdoors. I was surprised to find splendid spikes of Delphiniums one fall from seed sown the last of June. Of course they do still better after the first season. As soon as your Delphiniums are through blooming, cut the plants off. They will then bloom again the same season.

Consider Summer Mulching

Down South, and even here in Colorado, summer mulching can be employed to great advantage. This is simply covering the ground with a good thick dressing of straw, hay, or trash, after plants are pretty well grown. This keeps the ground moist, saves much watering, and winds up the season for weeding and cultivating. Understand, this is not to take the place of cultivation while plants are small, but is to be applied along in summer. It is especially desirable for such plants as Dahlias, Cannas, Asters, and all such good-sized plants.

General Suggestions for Growing Flowers from Seed

By observing these general suggestions you will be able to grow the different kinds of flowers, even though I do not give cultural directions in connection with each number on my list. Read this page once a week all season. I've boiled it down; there's a lot worth knowing and practicing in these few lines.

DO RIGHT THING AT RIGHT TIME

Unless your soil is quite sandy, be very careful about working it when too wet. Take a handful and squeeze it into a ball. If it fails to crumble when pulled apart, then it is fine for making marbles or 'dobe bricks, but too wet for working. Lay off until it dries out a bit more. You will gain in the long run. Some soils will not get over such handling, the rest of the season. You may work it down apparently fine, but there will be small lumps that will not pack well around the seed. Many times such soil will let the air in to the seed, dry it out and prevent germination.

PREPARING THE SEED BED

Next to securing the best of seeds is the matter of preparing the soil at the right time and in the right way. Every year I tell you to plow or spade up your gardens in the fall, leaving the ground rough so that Nature can work all winter for you, freezing and thawing the clods and making the ground mellow and fine for spring. Late fall plowing will also put a finish to many insect pests. I note that few people do this, but that's your loss.

You must have the surface fine and mellow to get best results, especially for fine seeds. After spading, use the rake vigorously and don't quit until you have the top soil as fine as possible.

For convenience in sowing, cultivating and picking the flowers, I like to lay off my gardens in beds about four feet wide, working from the paths and not tramping between the rows in the beds.

SOWING THE SEED

The finer the seed the shallower it should be covered. Petunia and other very fine seeds should be barely covered, other seeds that are larger should have one-fourth of an inch of soil over them, while the still larger seeds like nasturtiums and sweet peas may go down one to two inches. In this and all other work in your garden just use common sense. Imagine yourself one of the seeds and think how you would like to be treated. For extra early plants you may start the seed indoors, but for most things I prefer to wait until they can be sown in the open. I prefer the hardy, husky, outdoor-grown plants.

GERMINATING THE SEED

The smaller the seeds and the shallower they are sown the greater the danger of the light covering of soil drying out before the tiny roots get a good foothold in the ground below. Here's just where many people fail and then blame the seed and seedsman who supplied it. As a matter of fact, seeds retain their vitality for years and it is indeed seldom that failure to germinate is due to poor seed. You must neither cover the small seeds too deep nor let them dry out a single hour if covered shallow. On the other hand, you can prevent germination by flooding and keeping soil excessively wet.

Now here's a secret! After sowing and covering fine seeds very shallow, spread a thin layer of excelsior, torn to shreds, or coarse hay or straw over the bed, holding it in place with poultry netting well staked down. Or if the netting is not at hand use brush, corn-

stalks, or anything that will not smother the plants. Burlap may also be used in place of the excelsior. This prevents wind blowing the soil and seed away, and prevents seed from being floated into piles when watering the beds, and keeps the soil from drying out. As soon as the plants show up, then remove the covering.

It took me a number of years to discover that many of my failures with small seeds were due to my not getting them covered, and to slight neglect, just at a critical stage, which allowed the soil to become dry, killing the tiny roots just starting.

This drying out is a serious matter and I can't say too much in trying to impress on you its importance. You see, at best, the tiny roots from small seed are very close to the surface. Just the least dryness, and it's good night for them. That's why I advise the excelsior, burlap or cheese-cloth covering.

I used to sow pansy, aster and other small seeds on top of bed and rake them in—or try to rake them in. Now I either sift a thin layer of fine soil or sand, or the two mixed, over the seed, or, more often, I make shallow trenches with a stick or marker, sow the seed in them and cover. Sometimes I make these tiny furrows close together and sow the seed broadcast, then rake it all over gently and evenly. This gives the seed a 50-50 chance of getting covered a suitable depth. And if half the seed germinates the plants will be thick enough.

CULTIVATING AND WATERING

Weeds are great bluffers. Get after them from the very beginning in a manner that will give them to understand that they might just as well give up the battle first as last. However, weeds are useful, for they keep us digging and scratching around the plants and thus giving the top soil just the treatment it needs, but without them many would forget to keep the soil so thoroughly worked.

Remember that plants need air as well as moisture. Keep the soil loose.

Furthermore, frequent stirring of the soil conserves the moisture and if you will "Use the hoe more" you will need to "Use the hose less." Most people water their plants too much and do not cultivate them enough, and for that reason I have adopted the slogan, "Use the hoe more and the hose less." That's where you have a hose, of course. The same applies to irrigating from a ditch. Dry farmers get good results by using the hoe often. When I say hoe I mean anything from a hairpin to a tractor that will stir the soil. I use a garden rake a great deal in place of a hoe when plants are small. With some plants you can rake right over the rows without injuring the plants. Rows of gladioli from bulbils can be raked until plants are six inches high.

NOT ALWAYS TRUE TO COLOR

Do not be surprised if flowers planted in separate colors do not all come true to color. There is always a chance of slight mixing in the handling of seeds, with the best of care. Moreover, plants will "sport" at times. That is, they will produce flowers different from any known distinct variety. This is a virtue instead of a fault, for many of our finest varieties came by chance in just this way, the grand Giant Spencer sweet peas being a notable example. The new red sunflower, which originated here at Boulder, is another example. Zinnias do not all come true to color.

Garden Strategy

Often we can save work by doing certain things when conditions are most favorable, or thinking a little harder when new problems arise. Cultivating the ground with rake or hoe before a weed shows up may kill millions of them just starting. Thinning plants or weeding the rows when the ground is just moist and soft enough so the plants come out easily saves time and insures a good job. Stirring the soil at just the right time after rain or irrigation conserves the moisture and cheers the plants wonderfully. In short, by working more from the neck up we shall need to work less from the neck down.

For instance: In the fall of '21 we dug a lot of Le Marechal Foch and Flora bulbs and bulblets. The bulblets of these new varieties were valuable, so we wanted to same them all. We shoveled dirt, bulblets and all into gunny sacks after removing the bulbs from the rows. Then we washed the bulblets. This usually leaves them nice and clean, and is done in this way: We pour a painful of bulblets, dirt, gravel and whatever trash may be included, into a wash tub. Then, with a hose, we fill the tub nearly full of water. The lighter trash, such as pieces of gladiolus roots and husks, is then floated off. The tub is again filled with water, and contents stirred or agitated rapidly which causes the bulblets to swim, but the soil and gravel remain in the bottom. Tipping the tub quickly floats off the bulblets into trays with fine wire screen bottoms. Repeating this several times separates all the bulblets, and the job is usually thus completed.

A new problem arose this time. It appears that this soil had been the happy hunting grounds of many angle worms. The worms were loath to part with Foch and Flora. In fact they were set in staying with them, through thick and thin. They refused to float off with the light trash, and were equally head strong about remaining with the dirt and gravel in bottom of the tub. Therefore we had to unscramble about two bushels of bulblets and angworms somehow. We could employ the tedious process of picking out the worms, or picking out the bulblets and leaving the worms.

What would you have done? Plan a fishing party, inviting a score of boys, turning them loose to dig for bait in these trays of bulblets? Good! I also thought of another plan. We always keep quite a flock of chickens. Occasionally, not often, they get out and romp on my garden and my temper. Sez I to myself, sez I: "You fool fowls owe me something. Here's a chance for you to make good." So we spread the contents of the trays out thin and carried the trays into the chicken yard. As anticipated, a big white Blufforpinhorn roosted soon jumped aboard a tray and called out: "Hear ye! Hear ye! First and last call for lunch. Hurry, but don't crowd. Wom and children first!"—then, rooster-like, proceeded to gobble up as much of the lunch as possible. The festive board was quickly surrounded. Soon those bulblets were clean, ready to dry and ship.

Don't Kill the Cops

If Mr. Toad is found in your garden, don't harm him, but treat him as a friend, for he is your friend, arresting and executing garden criminals.

If your sweet peas or pansies seem sick and you find lady bugs or them, don't jump at conclusions. It's lice or aphids that have injured your plants, and the lady bugs are there trying to exterminate the pests.

Why Is A Weed?

How many times have we wondered why in the world there should be such things as weeds, also insect pests. I'm still wondering about the latter, but have a very firm conviction that the weeds serve a good purpose in one way at least. If weeds didn't grow as they do, the most of us would just naturally neglect the important matter of cultivating our plants. We might say we wouldn't, but I'll just bet we would. Our gardens need frequent stirring of the soil, both between the rows and among the plants, and it is in getting after the weeds, or trying to get the drop on them, that we give our plants this much needed cultivation, letting air in to the roots, putting the food elements, that the soil contains, into such shape that the plants can get hold of and utilize them.

Don't Kill Big Weeds?

No. I don't mean you should let them remain and go to seed. Don't worry about the weed seed crop for next year. There will be ample of this anyhow. What I mean is, don't ever let the weeds get big. Cut them down, or pull them up, in their tender youth. Funny isn't it, how we think we are really doing something great when we slaughter large size weeds, but we don't feel half that glow of satisfaction when we kill 'em off when small and when it is so much easier done. But the time to get the weeds is before they take their toll from the soil's fertility. Frequent raking, hoeing and cultivating is the way to get the weeds just as they are sprouting or openning their eyes on a very unfriendly world—for the weeds.

How to Transplant Weeds

This is easy. It's a natural gift with some gardeners. Simply have the ground wet when you go forth to give the garden the once over. Cut the weeds off well under the roots, but don't scatter them about. Follow the hoe with your feet, packing the recently loosened soil as you go. Then to complete the job, turn the hose on before the soil has had time to dry out well after hoeing. This treatment is practically sure to leave a good stand of weeds, full and life and pep.

Headwork and Footwork

Headwork is needed in all garden operations. Footwork is valuable at times also. For instance, when sowing and covering seed in rather dry ground, firm the soil well by walking right over the row. This brings the soil in close contact with the seed and prevents further drying out. Often seed will sprout planted this way, whereas if left with only the loose soil over it, would fail to germinate. Use the rake gently over the row after this treading. In transplanting roots, shrubs and trees, it is important to tramp or tamp the soil very firmly.

Burning Seeds and Bulbs

I know a lot of families who think they just can't afford anything more than the bare necessities for the home garden. They can't figure out an appropriation for a few nice flower seeds and bulbs. They really feel that way about it.

Yet they think nothing of taking a needless spin in the flivver of ten, twenty or fifty miles. Every mile burns up a packet of flower seeds or a gladiolus bulb. "Man has two great ambitions in life. One is to own a home; the other, to own an auto to get away from home." Funny, isn't it?

Pester the Pestiferous Garden Pests

Many of these pests come and go—were worse some years than others. We never know just what we may have to deal with before the season is over, but can be pretty sure will have trouble from some of them. So the sensible thing to do is to be ready to combat these undesirable citizens. "Do them as the would you—but do 'em fust." Have a sprayer ready.

First, we must understand that some pests will eat poison, on plants or put out as bait, while others, known as sucking insects, cannot be poisoned the same way. They must be destroyed by contact poisoning—the dope must be sprayed directly on the insect, and when done right, gets his goat.

Other remedies or devices are repellants, anything having a vile odor, such as carbolic acid, kerosene, turpentine, etc. Or a substance making an irritating dust, as air-slacked lime, ashes, tobacco dust, will drive the intruders away for a time. The effect of these repellants lasts a short time only and may have to be repeated. Air-slacked lime mixed with flower of sulphur is recommended as one of the best repellants for some things. Fresh poultry manure placed close to but not touching squash plants sometimes halts the bugs. Young chickens running among the vines scare the bugs away.

Then there is physical violence, in which you go to it and pick the bugs off by hand or trap them and destroy them. The hard-shelled squash bugs may be trapped by laying pieces of boards or shingles near the plants at night. The bugs crawl under them and in the morning are sluggish, when may be captured and dealt with according to law! Aster beetles may be hand picked, as generally not a great many at a time. Some use slug shot for aster beetles.

For grasshoppers take 2 lbs. bran or corn meal, mix dry with 1 oz. Paris green or arsenate of lead. Then mix with this 2 tablespoonfuls of molasses and about 1 pint water to which has been added the juice of half a lemon. Mix all together and late in evening sow it very thin, making it into flakes almost like snow. This will prevent poisoning birds or animals. In a day or two you may not see any grasshoppers, dead or alive, and will think they did not take the bait but moved on. Careful search will disclose many dead grasshoppers hidden, for the reason when Mr. Grasshopper gets sick with a pain in his tummy he wants to be alone and drags himself off to some hidden spot.

Cutworms. The same mixture is also used for cutworm bait.

Now for spraying. Practically all the insects that trouble our Western gardens, and that can be controlled by spraying, can be handled with only two kinds of dope. For poison spray use arsenate of lead, tablespoon to gallon of water. For sucking insects (lice or aphids) use as a contact solution "Black Leaf 40," one teaspoonful to a gallon of water, or Sulphur-Tobacco soap.

There are other preparations that will accomplish the same ends, but with these two and a good sprayer you can be master of the situation in most cases.

Kerosene emulsion may be used in place of Black Leaf 40, also there are other tobacco preparations, soaps, etc., that are good, though the Black Leaf 40 seems to be the most effective. To make kerosene emulsion, dissolve one pound of laundry soap in one gallon soft water and heat to boiling point. Remove from fire and add 2 gallons of kerosene and stir vigorously. After this is cooled,

add 10 parts water to one part the kerosene dope. This may of course be made in smaller lots, just so the proportions are kept about the same.

Sweet pea lice, or aphids, should be pestered with contact poison—Black Leaf 40, Sulphur-Tobacco soap. Don't spray with Paris green or arsenate of lead. Dashing the vines with hose discourages the lice.

Lice on cabbage may be sprayed with Black Leaf 40 or the kerosene emulsion. Throwing dust on the plants also helps.

Cabbage worms may be poisoned by spraying with the arsenate of lead solution until heads are half grown, with no danger of poisoning the heads, as grow from inside. Hot water, almost boiling, may be poured right on to the cabbage plants and will kill insects with which it comes in contact, yet does little or no harm to the cabbage. One gardener says he never fails to drive off cabbage worms by spraying or sprinkling the plants with water in which has been soaked some common tar paper. An experienced Brighton (Colo.) cabbage grower uses 1 lb. Paris green to 100 lbs. stucco, well mixed and shaken over the plants from a gunnysack.

Tiny fleas that eat turnips, radish, etc., just when they are coming up, may be controlled by shaking air-slacked lime or tobacco dust over the rows from a loose woven gunnysack. Ashes also helps some.

Small striped melon and cucumber bugs generally give way if plants are dusted with tobacco dust. Good idea to have several pounds handy.

Corn root worm can be side-stepped by not planting corn in the same place two years in succession.

This subject is too big by far for me to more than merely touch upon. Write your Agricultural College or County Agent for suggestions or bulletins.

To Kill Ants In Garden

Select a time when the ants are all at home, holding a family reunion. With sharp stick, make a few holes about 6 inches deep in the ant hill. Pour an ounce or two of carbon bisulphide into holes. Cover the hill with an old carpet or a Sunday newspaper. The fumes work downward and do the work. Ants may be kept off peony buds by sprinkling them (the buds) with common pepper.

Destroying Squash Bugs

"The squash bugs, like chickens, come home to roost. I found that in the early morning a very small area contained millions of them, so I hit on the plan of killing them with a blue flame gasoline torch, such as electricians use for soldering. In about an hour I killed about 98 per cent of all I had and have not seen a colony in years, and scarcely ever see a single bug. There was no damage to the plants, as the bugs fall on the ground as soon as they feel heat and hear noise."—H. J. Baldwin, Minnesota.

SOME MORE BUGGY SUGGESTIONS

One market gardener says: "Mix creosote with dry soil, then scatter some of this around the hills of squash, and see the bugs go."

A dust mixture of nicotine sulphate, for which the United States Department of Agriculture will supply a formula upon application, will keep the striped cucumber beetle from cucumbers, melons, squash and pumpkin vines.

PLANT SURGERY

Sometimes plants will be benefited by a minor or major operation, as suggested herewith. I'm not saying this surgical work is absolutely necessary, but have found it helps some in my own gardening.

Asters. Even though the seed is sown out-gest longer stems and better blossoms, as a rule, if you take up and transplant the plants. If two or more crowns show on one root, cut or pinch out all but one, before transplanting. Clip the tops of the leaves when transplanting. As soon as the first bud—the center or crown bud—appears, pinch it off. You lose one large blossom with a short stem, but gain by increasing the length of stems and size of blossoms of the main crop.

Cabbage. Cut off the tops of leaves—about one-third—when transplanting, unless plants are quite small. Some plants have two crowns. Pinch out one. Some are blind, having no crown. Throw such away.

Cannas. Divide the clumps that you take up in the fall. A small root will make a good plant and a clump of roots by fall.

Canterbury Bells. Pinch or cut off every blossom as soon as it begins to fade. Keep plants watered and cultivated and they will bloom again the same season.

Cobea Scandens. When the plants are 4 to 6 inches high, pinch the tops and they will thicken up and make a denser covering.

The clump **MUST** be divided if you want fine large blossoms. See suggestions elsewhere in "Garden Secrets" for dividing. Don't think you can yank off the tubers and that they will sprout from all parts like a potato. The eyes are all near the stem. Far better throw away the surplus, if do not have room to plant all the divisions, than to plant the whole clump. Better to give them to those who will appreciate and care for them.

To keep dahlia plants low and more bush form, and help to prevent their blowing over, pinch out the top when the first three pairs of leaves are developed. To get largest blossoms keep the plant pruned to only a few branches and then pinch off most of the buds, leaving the terminal one. Buds usually appear three in a cluster. Pinch off the two lower ones, leaving the center or terminal one. To make plants bloom their best late in fall, after the hot weather, cut the plant back within a foot of the ground along in July. New shoots or branches will develop and produce blossoms.

Daisy, Shasta. Cut them with long stems and a good deal of the foliage as fast as the blossoms come to full size. They will bloom again, and continue blooming if kept cut.

Dandelions. Cut the roots off just a little below the surface, as most people do when trying to rid the lawn of this pest, and the portion of the root left in the ground will make two or more dandelions grow where but one grew before, especially if you don't sow some clover and blue grass where the digging has been done. The grass tends to discourage the ambition of the dandelion root.

Delphiniums. Supposed to bloom once in a season, but by cutting them back as soon as they have bloomed you get another crop.

Gladiol. In cutting the flowers be sure to leave not less than four leaves to mature the bulb. Better leave six leaves or even

more. Keep your glad bouquet looking fresh and cheerful by cutting off the faded blossoms daily, and at the same time cutting an inch or two off the bottom of the stem. Make this cut on a slant. Change the water daily also. A glad bouquet should last at least a week, if spikes are cut when first blossom opens. Large gladiolus bulbs may be cut into 2 to 4 pieces before planting. Peel off the husk. Cut so as to get a portion of the root surface, also an eye, on each piece. Each piece will make a good flowering plant and a nice new bulb. Dust the cut surface with powdered sulphur. The cutting should be done the same day of planting.

Grass, Lawn. Begin cutting the new lawn as soon as the grass is several inches high. Cutting seems to thicken it up. Good plan is to cut often and let the short clippings remain on the lawn. Some of the best lawns I have seen never have the cuttings taken off the whole season through. This mulch also combats the dandelions, especially preventing dandelion seed from getting a start. Will not kill old roots of dandelions.

Gypsophila. (Perennial or Baby's Breath.) You can prolong the season of bloom by cutting back some of the plants when they are six inches to a foot high. They come on again, but flower later than those not cut back. Gyp roots may be pruned severely when transplanting.

Hollyhocks. In transplanting hollyhock roots, prune them quite a bit. They send out many fine roots from near the cut surfaces. It even benefits roots not transplanted to dig around them in the spring, and shove a spade down so as to cut some of the branching roots. If tops have made much growth before transplanting, then cut back the tops almost to the crown. But don't cut off the blossom shoot if it is showing plainly.

Iris. Sooner or later your Iris clumps should be dug up and the roots pulled all to pieces and reset. Some cutting may be required, but usually the clumps divide naturally and can be pulled apart. A small division soon makes a good sized blooming clump. That's why the price paid for a root of some new and fine kind proves a valuable investment. Better discard some the older, less desirable sorts, if room limited, and keep adding some the newer kinds. Avoid planting iris in same soil that has had iris before. If do not wish to change location of iris bed, then dig out the old soil and put in some new.

Melons. If size rather than quantity is wanted, then pinch off all blossoms and small melons but a few. Prune back the vines also. Same with other vine vegetables, such as pumpkins, squash, "cukes," etc.

Pansies. Often the tops grow too fast for the roots, if to be transplanted. Don't be afraid to cut or pinch back the tops if they are at all tall and "sprangly." It is not really necessary to keep the blossoms picked for several weeks after setting out the pansy plants, but picking the blossoms and buds closely will give you better plants for later blooming. And when any plants get quite tall and "loppy" and untidy looking, cut them right off to within 2 inches of the ground. Water and cultivate and within two weeks or so you will have blossoms again and better ones than if had not been cut back. If plants turn brown the chances are the red spiders are at work. At first appearance of this, cut back the plants partially at least, so you can get at them from all sides and beneath the foliage with the hose. Give them a good sharp spraying daily and you will beat the spiders in their game.

Peonies. The clumps of peonies do not require dividing often, but if taken up the roots should be cut into several parts, each with several eyes. For some reason or other a large peony root seldom makes good when transplanted. Best results come from small divisions. Largest blossoms can be had by disbudding. Leave only one bud to a stem.

Petunias. Make them bushy and sturdy by pinching off the tops when the plants are a few inches high. Or, good size plants may be cut off and new shoots will develop, making a large bush.

Roses. The following suggestions I have taken from a helpful book, "How to Grow Roses," published by Conard & Pyle, West Grove, Pa. Price \$1.50, prepaid. Better send to this firm and get the book, for it gives many details I have not quoted.

Two and three year old plants should be cut back severely at time of setting out, in spring. Leave only 3 or 4 buds on Hybrid Perpetuals and about 6 on the Teas and Hybrid Teas. Cut stem just above a bud that points out. Pruning determines the size and quality of the flowers.

Hybrid Teas and most other hardy roses should be pruned in March. The tender roses, Teas and Hybrid Teas, need not be pruned until April, when the sap begins to flow and buds begin to swell.

If few but extra large and fine flowers are wanted then cut out to the base all but three to five shoots and cut these back so as to leave only 2 or 3 eyes to the shoot. The more shoots you leave and the longer you leave those that remain, the more flowers you will get, but they will be smaller than if less shoots are allowed to grow and these cut back nearer to the ground. In cutting out shoots, always remove the old ones and leave those of the previous season's growth. This is recognized by its fresher, smoother, and lighter colored appearance than the old wood. The strongest shoots should be saved, and care given to placement of these that will produce a symmetrical bush.

Sweet Peas. Plant surgery should be employed daily on your sweet pea vines after they begin blooming. The more you cut the more you have and the longer the season of bloom. Like many other flowers, sweet peas were never intended for stingy folks. The more you cut and give away the more you have, and the longer they keep blooming. Try picking sweet peas without cutting, but instead of pulling the stems away from the stalk, push towards it.

Swiss Chard. "Eventually, why not now?" Slowly, many gardeners are learning the value of this plant. As noted elsewhere, Swiss Chard is useful in several ways. It is one of those "cut and some again" vegetables, but instead of cutting off the entire plant you just cut or pull off the outer stalks. New ones keep growing from the center so that a continuous supply of greens may be had all summer and fall, from an early spring sowing. But Swiss Chard may be sown any time until along in July.

Tomatoes. If growth is rank it is well to keep the plants pruned back so as to develop larger fruits.

Thinning. Don't neglect thinning so as to give each plant enough room to develop well. I don't know of any set rule, for much depends on what is to be thinned. But watch your rows and begin thinning early, leaving the strongest plants. A second thinning may be desirable, or even a third. Often in thinning you can transplant and fill in vacant places. Always water transplanted plants at once.

Strawberries. In setting out strawberry plants, cut off the tips of the roots. Many new, fine, hair-like roots will develop on account of this operation. And the tops

should also be trimmed back so that just several crown leaves show. If plants are taken up real early in spring, they may yet be dormant, with no green leaves showing. Though apparently dead they do splendidly if set out at this stage, provided the ground does not freeze before they get rooted. Too much freezing of the ground may cause failure, but mere frosts do no harm to plants wintered in the open with no covering.

Sunflower. A neighbor's cow gave me a little interesting demonstration in plant surgery. She reached through my fence and ate off all the leaves and branches of some fine double Chrysanthemum-flowered sunflowers I had planted for display along the north side of my home garden. It looked like a case of "All is lost," but I just let the naked stalks remain and kept them watered and cultivated. They soon sent out new growth at the joints and before fall were fine symmetrical, bushy plants, with many branches loaded with golden double flowers.

In this connection I recall an experience with zinnias, reported me by a good customer, Mr. Samuel Yaggy, at Syracuse, Kansas. He said that when his zinnias were several feet high a hail storm cut them down so just the bare stalks remained. But to his great joy Nature came forward with an armful of spare parts and fitted up those plants so they bloomed gloriously after all. That's one thing about damage from hail—we should never be too sure that all is lost. Often Nature will come to the rescue and save the day.

Put the Garden to Bed

Here's where you need to "use discretion." In providing winter protection for plants, many gardeners overdo a good thing by applying too much cover. Get the idea, once for all, that the protection is not so much to keep the frost out as to keep it in, and you will have better "luck." It is the drying out of the soil, the alternate freezing and thawing, and the whipping by the winds, that harm our plants in winter. And, strange to say, the danger is greater in our mild Colorado climate than in some much colder sections. This for the reason that where snows come early and remain all winter the snow gives the needed protection.

In our section, we cover raspberry bushes completely with soil, after bending them down as close to the ground as can be done without breaking them. This should be done before the leaves have fallen. Some cover grape vines the same way; others let them rustle for themselves. It is hardly necessary to cover grapes. Strawberry plants usually come through fine with us, with no winter protection, but if you do mulch them with straw or course manure, be sure to put most of the covering between the rows and plants and very little, if any, on top of them. A little coarse covering on top is good, but be careful. Don't smother the plants with heavy coat of manure.

Pansies usually live over if covered and cared for as suggested in my special instructions for growing pansies, given on another page.

About all I use for putting my gardens to bed is excelsior, dahlia and zinnia stalks. Nothing very heating about these, thrown lightly over the beds. Yes, leaves are good for some things, but apt to smother such plants as pansies. I never use them on such small plants. They are all right to work in around rose bushes and other shrubs. Some protect roses by forming a mound of dirt up around each plant, 10 to 12 inches high, just before the ground freezes. Later they may put on a covering of straw or leaves. Or, the latter may be used without the hilling up.

Be sure to anchor all covering, if you have winter winds like we do here. By leaving some dirt on the Colossal zinnia roots and turning the root end of the plant west, toward the prevailing winds, these seldom blow off. The excelsior is held in place by poultry wire, well staked down. Where available, pine boughs are excellent, or even brush without foliage will answer for many things. Peonies, iris, gypsophila, need no protection.

Rotate Your Crops

That is, don't plant same kind on same ground year after year. Different plants take different things from the soil, to some extent. Different pests attack different plants (some living over in location where operated the previous season). Plant root crops where peas and beans were last year. Plant tomatoes where corn was, etc.

How to Grow Onion Sets

Ordinary sets (bottom sets) are nothing more than regular onions grown so close in the row that they cannot grow to large size. Withholding water also prevents their growing large. The seed is sown in rows, but the rows are made wider, 3 or 4 inches, instead of the usual narrow row. Long experience and judgment are required to produce sets well-matured and of ideal shape, but this is worth experimenting with on a small scale. 80 to 100 lbs. of seed to the acre are used for commercial set growing. For small garden use, an ounce for 25 to 30 feet of row—wide row. Red Wethersfield is used for growing red sets; Yellow Danvers for yellow, and Silverskin for white. Brown Australian and Mt. Danvers are also good.

To Make Head Lettuce Head

Use any heading variety I list, although Denver Market and Prize Head seldom make true solid heads. Iceberg and Hanson are fine for home garden, as both can be used as leaf lettuce also. Los Angeles is best for market. Fine for home, too.

Lettuce will seldom head in hot weather, unless grown in shade. It is a cool weather-plant, doing best very early in spring, or late in fall, as head lettuce. The cool climate of the mountains is ideal for head lettuce. That's where the carloads are now grown for shipping. This is becoming a big and profitable industry in Colorado.

Sowing head lettuce seed late in fall, just before ground freezes, is one good way to get an early start the next spring. Very early spring sowing—March or early April is good. Bear in mind that the ground should be good and rich, and that the plants should be thinned or transplanted to 6 to 10 inches apart. Then they should be hoed often, the oftener the better. You can't expect to pluck large solid heads of lettuce from a bed in which the plants are as thick as the proverbial hair on the proverbial dog's back.

Peony Pointers

Although we might like to buy and plant big clumps and have them bloom freely the first season, yet this is not Nature's way. Plant divisions any time in fall or very early in spring. Fall is best. There is some advantage in planting strong one-year or two-year plants, but larger clumps will be a disappointment. Size of divisions often misleading. A small division from a 2 to 4-year-old plant is often better than a larger one from an older plant. Size of root not so very important either, as new roots are formed. Takes several years for peonies to show true to name blossoms.

Never neglect the peonies after they have bloomed. The care and regular watering you give them after blooming until fall produces, vigorous buds that will insure large and fine flowers the next year. As one peony grower sees it, the roots may be likened to storage batteries, which should be charged after blooming for the next flowering season. Fertilize by spading in manure around but not very close to peony plants. Never let the manure get close to roots or on top of the plants. This is important.

Doctoring Sick Plants

Do all you can to keep plants healthy, nipping insect attacks in the bud, so to speak, and promoting steady healthy growth by sensible care and cultivation. After a plant gets very sick, you'd better remove and destroy it, than spend much time trying to bring it back. Sure, there may be exceptions.

Would You Chew Wood?

You'd have a fit if the Missus would serve kindling and twine with your radish, turnips, beets, snap beans, etc. Yet many times these are served old and tough, and full of woody fibre and stringy entanglements. To avoid this, use vegetables when young and tender. To have them so when wanted, plant often. Don't think of planting radish, beets, beans only once. Plant every few weeks and see how nice it is to have them crisp, juicy and tender.

Iris—the Foolproof Plant

Give the iris half a chance and it will grow and thrive. Roots should be planted very shallow, just so well covered. Plant most any time of year, except when in bloom. Fall is ideal. Early spring is O. K., too. Iris needs only a small amount of water to do splendidly. Will thrive under rather dry and unfavorable conditions. Is a boon to dry farm gardens. A small division will sometimes, not always, bloom first year, and do fine after that. In a few years it produces a large clump which may be divided and re-set, making a dozen iris grow where only one grew before.

Cinnamon Vines for Shade

They make a nice background by training the vines over fences and unsightly objects. By planting the largest size roots and planting them early, the vines will provide more shade the first year than most anything else. And after the first year they do still better. Roots remain right in the ground, so one planting is the total expense and trouble. In very severe climates, it is well to mulch the roots for the winter. Plant the roots nearly a foot apart, laying root flat, and covering about two inches. Use large roots for best results. Unlike a dahlia root, the cinnamon vine root will grow even if broken into several pieces—each piece will grow. Quicker growth is obtained, however, if the terminal eye on small end is retained. Very slow to start. Be patient. Better mulch first winter.

"Keep the Ball a-Rolling"

The old idea with many folks was to have one big spring gardening spasm, followed by spasmodic cultivation and let it go at that. But now, with garden space so valuable, and produce from the garden so expensive, and also more appreciated when it is fresh, we are learning how to get the greatest efficiency from our gardens.

Companion and succession crops are planned, to use space to best advantage and for as long

a portion of the season as possible. Companion crops are early and late maturing kinds grown in alternate rows, so that when the early crop is off the late one may occupy the whole space for balance of the season. For instance, early radish, beets, lettuce, may go between rows of cabbage, tomatoes, squash or melons.

Succession crops are those following each other. The ground used for green onions from sets, radish, lettuce or early peas, may be used after these crops are off for celery, late sweet corn, beans or turnips. Two, three or even four crops of some things may be grown one after the other in a season.

LONG'S Random Remarks

Forget it. You can't expect to cut asparagus from a newly set bed. Should be cut very little, if any, even the second season. That is, if you want a good permanent bed that will deliver the goods. See page 6 of Hand Book.

Try planting morning glory and castor bean together. Thin to one plant of each in a hill.

Tomatoes thrive best in loose soil. Try digging large hole for each plant, and filling bottom with chopped sods. Avoid tramping ground close to tomato hills. Tomatoes respond to rich soil. They do not require great quantities of water.

Get most of your peas in early. Peas do best in cooler part of the season. Beans, however, thrive all summer until killing frosts. Here at Boulder we plant beans up to July 15th, and even as late as Aug. 1st.

Carrots do not require a great deal of water if well cultivated. Too much water often causes them to split open and rot. Make sowings up to middle of July for nice tender table carrots.

You can grow your own cabbage plants by sowing the seed right outdoors for main fall crop. Sow in April. Thin when small so each plant has room to become sturdy before being set out. If sow seed late, then use an early variety. Nothing better than Copenhagen Market.

Turnips grow fast. Sow from early spring to Aug. 1st. About July 15th to 25th is best for main fall or winter crop. Odd corners and ground from which early crops have been removed may be sown to turnips. Be sure to thin them early, if very thick.

Spinach is a cool weather plant. Runs to seed in hot weather. That is, the usual kinds do. Try New England for hot weather. Common spinach should be sown very early in spring. Better yet, sow in fall, either in September and let it get a start in fall and winter over, or just before ground freezes, so will come up early in spring.

Are you growing salsify (vegetable oyster)? If not, why not? Just fine for soup. Plant April or May. Thin to 2 inches, so as to get fewer roots but larger ones. Small roots are harder to clean and prepare for cooking.

Cucumbers grow to beat the band in warm weather. May be planted up to Fourth of July, or even later.

Ever grow Kohl Rabi? Take a chance on a nickel package.

I know a good gardener who plants his melons twice, whether they need it or not. First planting is made early. If escapes frost, he has an early start. But the second planting is in same rows, but made a week or so later. In case the first planting freezes off, the second one is there all ready to pop through, and comes on earlier than if

the patch were replanted after frost. Cost of seed is a small item compared with results from early crop. If both lots escape frost, the late one is hoed out.

My sales of Swiss chard are increasing by leaps and bounds, as people learn to appreciate this vegetable. Read about it in catalogue. After serving all the different purposes mentioned there, the roots can be taken up late in fall, transplanted into boxes and put in cellar near window. Will go on growing and providing splendid crop of greens for winter use.

Table beets should be planted every few weeks up to middle of July, to supply nice tender young roots as wanted all summer, and for canning. A great big "whopper" beet may be all right for exhibition purposes or to feed cows and chickens, but for table use the beets should be pulled when only partly grown.

In setting out an asparagus bed, make the rows 2 to 3 feet apart, and set plants 12 to 15 inches in row. Make a trench so the plants may be set just deep enough that the crowns will come 3 to 4 inches below level of ground. Spread the roots out flat, instead of jabbing them down straight. Fertilize the ground heavily each year between the rows, digging the manure into the soil. Don't waste effort filling deep trench with manure, as the roots do not go down deep. Fertilizer on top will seep down to the spreading roots.

Cauliflower heads best late in fall. You can grow your own plants from early-sown seed out in the garden, same as mentioned for cabbage. Tie the cauliflower leaves up to protect the head and keep it white. Do this when head is yet small.

Everlasting flowers are very popular now. Great quantities are grown and sold to florists, flower stores and art shops, for basket work and winter bouquets. See additional suggestions in my catalogue.

Rutabagas take longer to grow than turnips, so latest planting should be made not later than early July.

Get the jump on the garden pests by having a sprayer and several kinds of dope on hand before the pests show up. "A shot in time, saves nine."

Very early plantings, when ground is still cold except just on top, should be shallow. If seed gets down too deep in the cold wet ground it may rot. But later, when soil is warmed to a greater depth, you may plant deeper. In this connection it seems reasonable to suppose that we should not plow or spade ground deeply early in spring and plant at once in the soil that has been turned up from below, and has not yet had time to warm up. This is another reason for fall planting. Plow or spade deeply in fall, then give the top shallow spading or cultivating before planting in spring.

How do you transplant tomato plants? Do you just cover the portion of the plant that was in the ground before? Set your tomato plants very deep, so that more than half the plant is under ground. Some large and lanky plants should have three-fourths their length under ground. Pinch off all leaves except the few to remain on top of ground. If plants are extra large or tall, lay them on a slant in shallow trench, thus keeping all parts near the warm surface. Tomato plants take root all along any part of plant covered. Tops are not whipped and broken by winds when set this way. Set other plants deep also, just so you don't cover the crowns. Always water them at once, if possible.

Here's where many gardeners make a mistake: They think that rich soil is necessary to germinate and start seeds in boxes indoors or in hotbeds. Seeds require just heat and moisture to germinate. Given these conditions they will germinate with or without soil. In trying to make soil very rich for starting plants indoors, one is apt to burn the tiny plants. Use just any fine loose soil at first, and give rich soil after setting out in the garden. That's the principle I work on with my hardened pansy plants.

Theoretically, if you plant extra early, medium and late varieties of peas at the same time you will have a succession, one variety maturing after an earlier kind has come and gone. But in practice it doesn't always work out this way. Too many are likely to come on at about the same time. Better make some plantings a little later, sowing the extra early ones first. Try Ameer (Giant Alaska) planted just as early as the ground can be worked nicely. Then a little later, and when ground is warmed up somewhat, plant Laxtonian or Blue Bantam. In a week or so put in some Dwarf Telephone or some other medium to late varieties.

In very small gardens it is not advisable to use space for squash, pumpkins, or even sweet corn, for there are many other things that will produce much more valuable vegetables on same ground. Let the large gardeners and farmers grow some of these vegetables which require considerable room.

Never plant just one row of corn. No matter how few hills you may have, arrange them in blocks, several hills or more each way, so the ears will stand a better chance of being fertilized. Otherwise the ears may be only partially filled.

Try this for germinating parsnips and other seeds you have had trouble getting to grow. Make a small trench the right depth for whatever seed you are sowing. Nearly an inch deep would be all right for parsnip. Now wet the bottom of trench thoroughly. Sow the seed. Cover as usual, with soil not muddy. Sprinkle the covered row, so covering is well moistened. Either keep row just moist by light sprinkling, or as soon as top dries a little, run over it with the rake to break the crust and make a dust mulch. Running a small furrow next to the seed row, and letting water run down it, is another way of insuring sufficient moisture.

Heavy, stiff clay soils, or, in fact, most any kind, can be loosened and improved by sprinkling a pound of lime to 10 square feet and working it into the soil a month or so before planting. Do not use lime and manure the same season.

Park Your Hens at Home

Time and again customers have told me how a neighbor's White Shorthorn pullet or Jersey Red rooster has wrought havoc in their pansy beds, or laid waste a promising crop of tender lettuce or luscious Laxtonian peas. When I say, "Why not kill off a few—fried chicken is sure fine, and even roast hen is nourishing," they reply that otherwise the owners of these Bolsheviks are fine neighbors, and they hate to have any trouble with them.

Now, friends, listen! You have my permission to keep all the chickens you wish—but please park them on your own lot. Look to your fences. If clipping one wing does not suffice, try clipping the tail—close behind the ears. There, I knew you meant all right, but have been careless. Glad you see the point. In behalf of your neighbor, I thank you.

To Grow Fine Sweet Peas

One secret in growing finest sweet peas is getting them into well-prepared ground rather early in the spring. True, later plantings often do well, but the sweet pea thrives best under rather cool, moist conditions. If given a chance the sweet pea will send its roots way down deep into soil that keeps somewhat cool and moist even in hot weather. But it must get an early start to make this deep root growth. Deep digging and pulverizing of the soil encourages this deep root development.

It is not necessary, however, to break your back digging a ditch deep enough for a water main, though some trenching is good. In doing this, lay aside the top soil, dig and pulverize the subsoil, mixing manure with it, then put back the top soil. Many growers do not fill the trench quite full, but draw the soil to the plants as they come up. But planted on fairly good soil, well-worked up, and on level ground, sweet peas will usually do nicely. A good scheme in either plan is to make a trench say nearly a foot deep right up close to the sweet pea row. Fill this trench with manure. Some soil may be put on top. Then during the season turn water into the trench once a week or so. The enriched water will find its way to the sweet pea roots and stimulate growth. A little bone meal worked into the soil at time of planting is also good. But use this sparingly, as it is very strong. Avoid use of fresh poultry manure.

An ounce of seed will sow from 15 to 20 feet of row. Cover 2 inches, firming with the feet if ground not wet. Begin cultivation as soon as plants are up. Water by running a small ditch along the row, giving a good soaking once a week or so, rather than just a little every day. But the sprinkling system may of course be used instead. Lice or aphids often check the growth. Watch for them. Spray with contact poison, getting under the leaves, where these pests are most numerous. Remember you can't kill lice by putting poison on the plants. The tobacco or kerosene emulsion must hit the lice to do the work. Dashing the vines several times a day with the hose checks the work of lice. Give the vines support and train them to it, beginning early. Keep blossoms picked. The more you pick them the more and longer they will bloom. To pick sweet peas, grasp the stem close to where it is attached to main branch, push towards, not away from, the branch. It parts easily from branch this way.

Your "Aggie" College Will Help

Write these colleges asking for information concerning your special farm and garden problems. I receive many inquiries that should be sent to the Agricultural College. I can't give the time to answer, even if I had the data at hand, but the college is at your service and is paid for this work. You will find the professors very obliging in such matters.

Some states do not have separate Agricultural Colleges, but handle this work in connection with their universities. In either case, just address your inquiry to **Agricultural College**, to town or city I give herewith, and you will reach the department you wish. Here are some of our western state "Aggies":

Colorado, Fort Collins. Idaho, Moscow. Iowa, Ames. Kansas, Manhattan. Minnesota, St. Paul. Montana, Bozeman. Nebraska, Lincoln. North Dakota, Agricultural College. Oklahoma, Stillwater. South Dakota, Brookings. Texas, College Station. Wyoming, Laramie. Utah, Logan.

Here's To Your Health!

Time and again I've talked about the advantages of growing your own vegetables—having them fresh from the garden, and more of them. Have told you how such noted doctors as Mayo, Wiley, and others who ought to know, recommend eating more "garden sass" and as fresh from the garden as possible. Have told you how digging in the soil and pottering around among your flowers is bound to react favorably on your health. And a lot more.

But seems like everything to be said along these lines has a string to it. Naturally, if you follow my suggestions, I or some other seedsman will benefit from your garden activities. Naturally, also, I sorta feel that I'm the logical seedsman to be benefited. For two reasons: I help you, when you buy Long's "Tried and True". That's one reason. The other is that I need the benefit. There you are—two good reasons.

Now to prove that I'm a good sport I'll tell you a few things "for your health's sake," that don't concern me in the least—except, of course, that the longer you live the longer I'll have a chance to sell you something. So it does seem like we can't get away from the selfish side of any proposition.

Really, though, I can't mention much, if anything, that you don't already know. However, it has been well said that we don't need so much to be informed as to be reminded. So I'll remind you of a few things that will tend to keep you on the main highway to good health and longer life.

Drink more water. How much? Well, at least twice as much as you've been drinking will probably be none too much. Begin with a glass first thing in the morning. Don't eat more than 25 kinds of food at one sitting. Just a few kinds for one meal is better. Don't eat as if your car is parked at the curb with motor running, waiting for you. If you must hurry, eat only part of the meal. Eat less as you approach middle life. Slow down. Have tonsils examined and teeth X-rayed and follow advice of your doctor and dentist. (Those who wear store teeth may skip a line or so here.) Don't run to catch a car or a bootlegger. There'll be another one along soon. If worrying produces satisfactory results—aids digestion; sweetens the breath and disposition—then worry to beat the band. Remember, "An apple a day keeps the doctors away" and "The whiter the bread the sooner you're dead". And, of course don't forget the Saturday night bawth.

Don't take unnecessary chances. Don't do fool stunts. Don't make a super fool of yourself by trying to win the loving cup in a coffee drinking or egg eating contest. Don't jay-walk. Relax. Don't keep keyed up 16 hours a day. Have a hobby. But ride it instead of it's riding you. Walk at least a block a day. You need the exercise. Saves gas, too. Don't shy at fresh air. Think much about good health, little of your ills. Don't pour over all the details of scandals and murders. Read something else also. Do a kind deed once in a while, if only for the reaction on yourself. Smile sometimes and rest your face. Don't take yourself, or anyone else, too seriously.

Don't run your motor in closed garage. Monoxide gas is deadly but gives no warning. Don't try to capture a bandit. That's the policeman's job. Don't try to teach the road hog a lesson. You'll be dead just as long as though you were wrong. Don't argue with wifey if she tells you to come along to a bridge party—unless the hammer, loose table legs, and other artillery are beyond her reach. Smoke fewer cigarets and drink no booze.

No Orders Filled On Sunday

Please don't waste good money on telegrams, air mail letters, special delivery letters, or burn up gas driving to Boulder, with the idea that we will fill orders on Sunday. We are willing to do all but break our necks trying to fill orders promptly six days a week. I'm not saying we will all be found in church on the seventh day, but we sure need to let up one day in seven during the strenuous rush season to avoid nervous prostration or sudden death. Thanks. I knew you would take this in the right spirit when you understood the situation.

We Have No Agents

Owing to the popularity of Long's Tried and True seeds, I receive many requests from merchants wanting to handle our seeds on commission, or buy in bulk to sell again. So I'm taking this opportunity to explain that, with only several exceptions, we sell only direct to the planter. I appreciate the compliment when merchants and others say they have heard so many good words for our seeds that they would like to handle them. But I sure like to deal direct with the "ultimate consumer". This lessens the chances for mistakes and misunderstandings. Occasionally, I contract for an unusually large amount of seed of something I know to be especially good, such as the two onions, Mt. Danvers and Mt. Red Globe, and can spare some to dealers at wholesale. Even then, I prefer that you buy this seed in our own sealed packages. We will seal lots of 5 pounds or more of this onion seed for dealers, if requested. The only merchant handling our seeds is W. D. Schoolcraft, of Longmont, Colo. We once owned his store, and have never had the heart to refuse Mr. Schoolcraft's annual request to continue selling our line there. He is so enthusiastic, and says he just must have our seeds, so I fit him out each spring.

"Your Subscription Will Expire"

As the magazines announce: "Your subscription expires with this number." There's one way to renew your subscription to a magazine. Pay up.

There are two ways to keep Long's Garden Book coming to you each January. One is to send me an order. That puts you in good and regular standing for two years more. The other way is to request a copy. This is not quite so certain as the other way, because it isn't a case of "Women and children first", but "Customers first". After those who have ordered within two years have all had catalogues, we are glad to send to others on our list as long as our supply lasts. Every spring we have to refuse some late requests.

Of course, I don't expect an order from every one every year. No mail order house does. But I sometimes wonder how many of you folks are like the lady who told the druggist she believed in dividing her business between him and his competitor down the street. Told him she always bought her postage stamps from him and had her prescriptions filled at the other store. Seems to me sometimes that all I do for some of you is to supply stamps (being garden talks, etc., in this case) while some one else fills your subscriptions (seed and bulb orders). Not that I care at all, you understand, but I just wondered if you ever thought of it in that way!

"Your Colorado Sunset hollyhock has just bloomed and we are much pleased with it."—Wakefield Floral Co., Charlotte, N. C.

THE J. D. LONG SEED COMPANY

Read BUSINESS TERMS Before Ordering

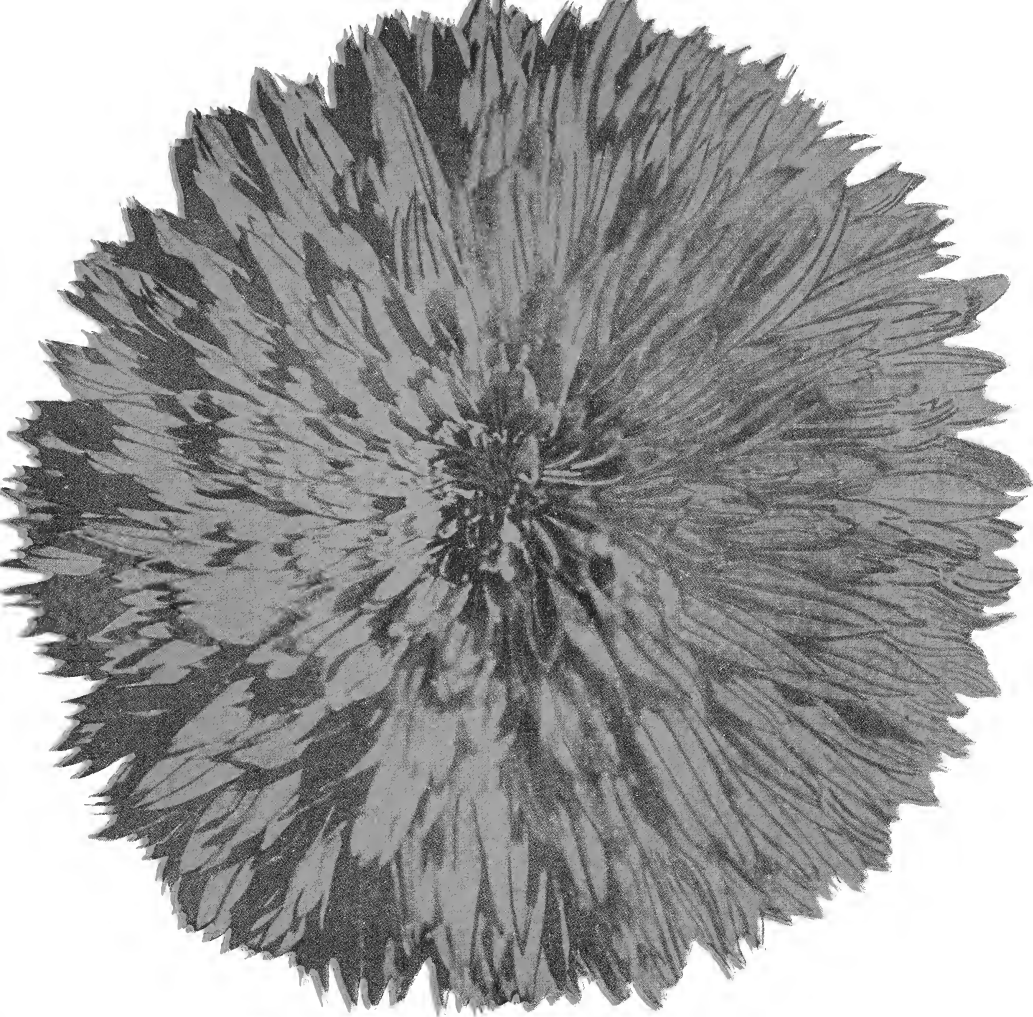
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LONG'S Re-Selected

“Chrysanthemum Sunflower”

The illustration does not do this fine sunflower justice—having too much shading in the photo. The bloom is a rich, golden, glowing, uniform yellow, with no other tint or shade.

No. F104. Very rich golden yellow flowers, 5 to 8 inches, fully double. Petals beautifully quilled, giving the appearance of a glorious chrysanthemum or dahlia. The free blooming plants, 6 to 7 feet tall, have many branches, each branch terminating in one of these attractive golden blooms.

This is not a new variety, but the seed I offer under F104 is special stock from my own plants, selected and re-selected for years. Ordinarily, this variety comes very uneven, with a good many off types and varying shades. Mine varies just a little yet, but is better than any I have been able to find elsewhere. The all-double strain of this sunflower makes very little seed. Supply limited. Sold in packets only.

Price for Re-Selected No. F104 Seed: Pkt. 25c; 2 for 45c; 5 packets \$1.00.

ANOTHER UNIQUE SUNFLOWER --- “RED AND GOLD”

No. F106. Originated here at Boulder by Prof. Cockerell. Often listed as the RED Sunflower, but does not come all red. Flowers single, 6 to 9 inches, vary in color from pale lemon to coppery-red. Many of the blooms are marked like those of the Gaillardia. Plants about 7 feet high. A distinct novelty.

Price for No. F106 Seed: Pkt. 10c; ½ oz. 35c.

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LONG'S DAHLIA-FLOWERED ZINNIAS (True Aristocrats)

- Z13 **Exquisite.** Light rose, with center a deeper rose. Very large.
- Z14 **Golden State.** Rich orange-yellow.
- Z15 **Crimson Monarch.** Gigantic. Largest and best of the red shades.
- Z16 **Dream.** A fine deep lavender, turning to purple.
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SPECIAL: Any 2
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PRICES: Any Dahlia-Flowered Variety or mixed at: Pkt. 15c; $\frac{1}{4}$ oz. 60c; $\frac{1}{2}$ oz. \$1.00; oz. \$1.90.

LONG'S COLOSSAL ZINNIAS (Gorgeous)

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|-----------------------|--------------------------|------------------|-------------------------|
| Z1 Snow White | Z2 Apricot-yellow | Z3 Pink | Z6 Golden-yellow |
| Z7 Rich Orange | Z8 Purple | Z9 Salmon | Z10 Scarlet |

Price for any color Colossal: Pkt. 10c; $\frac{1}{4}$ oz. 30c; $\frac{1}{2}$ oz. 50c; oz. 90c.

LONG'S MASTODON MIXED ZINNIAS FOR 1930 (Unusual)

- Z20 A marvelous "All-in-One" mixture of my gigantic Dahlia-Flowered Strain and choicest Colossal in giant size and rare colors. Bound to make a wonderful show from mid-summer to killing frost. Pkt. 10c; $\frac{1}{4}$ oz. 50c; $\frac{1}{2}$ oz. 80c; oz. \$1.50.

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